



**OIOS**

Office of Internal Oversight Services

## **INTERNAL AUDIT DIVISION**

# **AUDIT REPORT**

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### **Investment performance monitoring and evaluation**

**Performance monitoring and evaluation of investments would benefit from enhanced institutionalization of policies and practices to reduce the risks of inconsistent operations and knowledge transfer. Management of market risk for the fixed income portfolio can be enhanced with the adoption of strengthened reporting and monitoring tools.**

**8 October 2009**

**Assignment No. AS2009/801/01**

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United Nations  Nations Unies

INTEROFFICE MEMORANDUM

MEMORANDUM INTERIEUR

OFFICE OF INTERNAL OVERSIGHT SERVICES - BUREAU DES SERVICES DE CONTRÔLE INTERNE  
INTERNAL AUDIT DIVISION - DIVISION DE L'AUDIT INTERNE

TO: Mr. Warren Sach  
A: Representative of the Secretary General for Investments,  
United Nations Joint Staff Pension Fund

DATE: 8 October 2009

REFERENCE: IAD: 09-02970

*for*  
FROM: *William Petersen*  
Fatoumata Ndiaye, Acting Director  
DE: Internal Audit Division, OIOS

SUBJECT **Assignment No. AS2009/801/01 - Investment Performance Monitoring and Evaluation**  
OBJET:

1. I am pleased to present the report on the above-mentioned audit.
2. Based on your comments, we are pleased to inform you that we will close recommendation 7 in the OIOS recommendations database as indicated in Annex 1. In order for us to close the remaining recommendations, we request that you provide us with the additional information as discussed in the text of the report and also summarized in Annex 1.
3. Please note that OIOS will report on the progress made to implement its recommendations, particularly those designated as high risk (i.e., recommendation 5), in its annual report to the General Assembly and semi-annual report to the Secretary-General.

cc: Mr. Bernard Cochemé, Chief Executive Officer, UNJSPF  
Ms. Suzanne Bishopric, Director, Investment Management Division  
Mr. Ajit Singh, Deputy Director, IMD Risk Management  
Mr. Swatantra Goolsarran, Executive Secretary, UN Board of Auditors  
Ms. Susanne Frueh, Executive Secretary, Joint Inspection Unit  
Mr. Moses Bamuwamye, Chief, Oversight Support Unit, Department of Management  
Mr. Byung-Kun Min, Special Assistant to USG - OIOS  
Mr. William Petersen, Chief, New York Audit Service, OIOS

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## INTERNAL AUDIT DIVISION

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### FUNCTION

*“The Office shall, in accordance with the relevant provisions of the Financial Regulations and Rules of the United Nations examine, review and appraise the use of financial resources of the United Nations in order to guarantee the implementation of programmes and legislative mandates, ascertain compliance of programme managers with the financial and administrative regulations and rules, as well as with the approved recommendations of external oversight bodies, undertake management audits, reviews and surveys to improve the structure of the Organization and its responsiveness to the requirements of programmes and legislative mandates, and monitor the effectiveness of the systems of internal control of the Organization” (General Assembly Resolution 48/218 B).*

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### CONTACT INFORMATION

#### ACTING DIRECTOR:

Fatoumata Ndiaye: Tel: +1.212.963.5648, Fax: +1.212.963.3388,  
e-mail: [ndiaye@un.org](mailto:ndiaye@un.org)

#### CHIEF, NEW YORK AUDIT SERVICE:

William Petersen: Tel: +212-963-3705, Fax: +212-963-3388  
e-mail: [petersenw@un.org](mailto:petersenw@un.org)

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## **EXECUTIVE SUMMARY**

### **Investment Performance Monitoring and Evaluation**

OIOS conducted an audit of Investment Performance Monitoring and Evaluation. The overall objective of the audit was to assess the adequacy of policies and procedures guiding performance monitoring and evaluation and assess the accuracy and consistency of investment performance and attribution reporting with consideration of performance objectives and benchmarks across segments of the portfolio. Within this environment the audit linked the fund segments' performance to the feedback for the internal investment advisors and also considered the role of risk management activities. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

While the overall state of internal control is satisfactory, Investment Management Division (IMD) performance monitoring and evaluation would benefit from enhanced institutionalization of policies and practices to reduce the risks of inconsistent operations, key man, and knowledge transfer. Management of market risk for the fixed income portfolio can be enhanced with the adoption of strengthened reporting and monitoring tools. Achieving overall improvement will require addressing a number of significant issues including the need to:

- Document the policy on investment performance monitoring and measurement in the Investment Policy and Procedures Manual to serve as a reference point for investment officers and as an internal control tool.
- Document in the Manual the governance over, and the procedure for the selection of, the portfolio benchmarks.
- Prepare a suite of fixed income performance and attribution reports to stratify the fixed income book on a granular basis for comparison with the benchmark.
- Develop clear performance goals for investment advisors for the Performance Appraisal System (PAS) and measurement criteria, including measurement of contributions to the longer-term fund performance.

## TABLE OF CONTENTS

<b>Chapter</b>	<b>Paragraphs</b>
I. INTRODUCTION	1 – 5
II. AUDIT OBJECTIVES	6
III. AUDIT SCOPE AND METHODOLOGY	7 – 8
IV. AUDIT FINDINGS AND RECOMMENDATIONS	
A. Policies and Procedures for Performance Monitoring and Measurement	9 – 11
B. Investment Performance Measurement and Attribution	12 – 30
C. Investment Managers' Performance Evaluations	31 – 35
D. Risk Management Policies and Procedures	36 – 40
V. ACKNOWLEDGEMENT	41
ANNEX 1 – Status of Audit Recommendations	

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## I. INTRODUCTION

1. The Office of Internal Oversight Services (OIOS) conducted an audit of investment performance monitoring and evaluation within the Investment Management Division (IMD) of the United Nations Joint Staff Pension Fund (UNJSPF). The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

2. The Fund comprises the Secretariat, with the responsibility for administrative matters, and the Investment Management Division, with the responsibility for the investment of the Fund's assets. The management and administration of investments of the Fund is the fiduciary responsibility of the Secretary-General of the United Nations. This responsibility has been delegated to the Under-Secretary-General for Management, as the Representative of the Secretary-General for the Investments of the UNJSPF. The Representative is assisted by IMD, which manages the Fund's portfolio on a day-to-day basis.

3. The Fund invests in a global portfolio of equities, fixed income, real estate and short-term instruments. All investments must meet the criteria of safety, profitability, liquidity and convertibility as endorsed by the General Assembly. As of 31 May 2009, the market value of the Fund's assets was US\$32,607 million compared to US\$31,290 as of 31 December 2008 and US\$41,713 as of 31 December 2007. This change in market value tracks the recent volatility in global markets. As of 31 May 2009, the asset allocation was: 58.7 per cent in equities, 34.5 per cent in fixed income (i.e., bonds), 4.3 per cent in real estate, and 2.5 per cent in cash and short-term holdings.

4. The Fund's current benchmark, comprised of 60 per cent Morgan Stanley Capital International World Index (MSCIWI) for equities, 31 per cent Barclays Capital Global Aggregate Bond Index for fixed income, six per cent National Council of Real Estate Investment Fiduciaries Open End Diversified Core Equity Index (NCREIF ODCE) for real estate, and three per cent Merrill Lynch 91 Day Treasury Bill for cash and cash equivalents, was introduced in 2006 at the conclusion of a study by Mercer. At the time of the audit the benchmarks for both the fixed income and real estate were in the process of being reviewed. Small cap portfolios, managed externally, are assigned separate benchmarks, e.g., Russell 2000, Russell 2000 Value, or MSCI Europe Small Cap, to align with the portfolio mandate.

5. Comments made by IMD management are shown in *italics*.

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## **II. AUDIT OBJECTIVES**

6. The main objectives of the audit were to:
- (a) Assess the adequacy of policies and procedures for performance monitoring and measurement;
  - (b) Assess the accuracy and consistency of investment performance measurement and attribution
    - i. Appropriateness of the existing performance objectives and benchmarks
    - ii. Objectiveness and fairness of performance reporting and presentation
    - iii. Adequacy of performance monitoring and reporting at the Fund level and sub-fund level (portfolio level);
  - (c) Assess the adequacy of performance evaluation for IMD investment officers and external managers; and
  - (d) Assess the adequacy of risk management policies and practices.

## **III. AUDIT SCOPE AND METHODOLOGY**

7. The audit scope encompassed the investment management structure, investment performance monitoring and measurement process and systems, performance objectives and benchmarks, and IMD's risk management practices, all within the middle office operations. The audit reviewed IMD's policy and procedures pertaining to investment performance monitoring and measurement, and included substantive testing for the period 2007 to May 2009, to validate control adequacy and effectiveness.

8. The audit methodology included: (i) reviewing relevant documents and records including policies and procedures, UNJSPF Board and Investments Committee meeting minutes and discussion papers; and (ii) performing audit tests to ensure that existing internal controls were in place and effective; (iii) engaging an industry consultant to review and comment on procedures and reports considering the effectiveness of benchmarks and the adequacy of investment performance reporting; (iv) interview and observation of key staff; and (v) follow-up of prior audit recommendations.

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## **IV. AUDIT FINDINGS AND RECOMMENDATIONS**

### **A. Policies and Procedures for Performance Monitoring and Measurement**

#### Performance monitoring and measurement functions

9. Investment performance monitoring and measurement is undertaken by the risk management team in IMD. The team currently consists of a Deputy Director for Risk and Compliance, a Risk Officer, a Compliance Officer (vacant as of the audit date), a Senior Risk Assistant and a Senior Compliance Assistant. The Senior Risk Assistant also serves as the back up for the Risk Officer and is trained to perform most investment performance reporting activities.

#### Formal policy and procedures

10. The Investment Policy and Procedures Manual (Manual) is a comprehensive document that covers the general policies applicable to the investment of the Fund's assets, the organization and functions, and investment procedures. The current version of the Manual was approved by the RSG on 26 June 2007. Portfolio performance evaluation enhances the effectiveness of the Fund's investment policy by acting as a feedback and control mechanism which should be documented as an integral part of the Fund's investment policy and procedures. OIOS noted that there were no policies and procedures in the Manual addressing investment performance monitoring and measurement.

#### **Recommendation 1**

**(1) Investment Management Division management should document its investment performance monitoring and measurement policy in the Investment Policy and Procedures Manual to provide more background and detailed guidance on investment reporting, monitoring and evaluation, to serve as a reference point for investment officers and as an internal control tool.**

11. *IMD accepted recommendation 1 and stated that it is in the process of reorganizing the Investment Policy and Investment Manual to capitalize on information which will become available following the modernization of IMD infrastructure. As part of that effort, IMD will address this recommendation, incorporating more detailed investment reporting and provide more thorough investment performance reporting. Recommendation 1 remains open pending confirmation by management that the policy manual has been enhanced as discussed and published.*

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## **B. Investment Performance Measurement and Attribution**

### Reporting

12. The risk management team produces a package (weekly, monthly, and quarterly) of Performance Measurement and Attribution Reports. Many of the reports IMD relies upon are in Excel format. The spreadsheets are populated with formulas, and the reports are refreshed when new data from the master record keeper is imported. The spreadsheets were not secured; however, this risk is mitigated as the spreadsheets reside on the "Risk" drive which is only accessible by members of the risk management team. Most reporting work is performed within Excel files, and then transferred for general use to the shared drive in adobe acrobat format thus preventing the data from being changed.

13. Data integrity is also ensured with manual validation controls that IMD performs (e.g., verifying performance statistics generated in Excel with on-line reports from Northern Trust, incremental returns in fixed income attribution reports must sum up to a total return, etc.). However, noted the data validation control process was informal and not documented as part of the policies and procedures.

### **Recommendation 2**

**(2) IMD management should formalize the performance monitoring and reporting process with written desk procedures, and strengthen the process wherever possible in terms of security, report validation and data integrity.**

14. *IMD accepted recommendation 2 and stated, similar to recommendation 1, that it is in the process of reorganizing the Investment Policy and Investment Manual to capitalize on information which will become available following the modernization of IMD infrastructure. As part of that effort, IMD will address this recommendation, and incorporate more detailed investment reporting and provide more thorough investment performance reporting. Recommendation 2 remains open pending confirmation by management that the detail desk procedures have been enhanced as discussed and published.*

### Current Benchmark

15. IMD utilizes a composite benchmark which is known by any of the following terms: Total Fund Benchmark, Policy Benchmark or Strategic Asset Allocation. It is intended to be reflective of the total portfolio's objective, and is comprised of the following components:

<b>Asset Class</b>	<b>Strategic Allocation</b>	<b>Index (policy benchmark)</b>
Equity	60% +/- 7%	Morgan Stanley Capital International All Country World Index (MSCIACWI)

Asset Class	Strategic Allocation	Index (policy benchmark)
Fixed income	31% +/- 7%	Barclays Capital Global Aggregate Bond Index
Real estate	6% +/- 3%	National Council of Real Estate Investment Fiduciaries Open End Diversified Core Equity Index (NCREIF ODCE)
Cash and cash equivalents	3% +/- 3%	Merill Lynch 91 Day Treasury Bill

16. IMD did not maintain a master list of all benchmarks used. The most complete list available was part of the Mercer 2006 study, and included the U.S. Growth Small Cap mandate (liquidated December 2006), and the Japan Small Cap mandate (liquidated March 2008).

17. Further to this, there are two active equity mandates within the Fund's portfolio for which no manager benchmarks exist: the Africa Emerging Markets Fund and Asia Infrastructure Fund. It is important to note that each of the Africa Emerging Markets Fund, Asia Infrastructure Fund and the Emerging Markets Middle East Fund are allocated only small percentages of the Fund. There is no clear rationale as to why only one of these small allocations (the Middle East Fund) has been assigned a benchmark where the others have not.

### Recommendation 3

**(3) IMD management should maintain a master list of benchmarks utilized for all aspects of the portfolio within its policies and procedures, i.e., the Manual. Further, IMD management should delineate and document the parameters by which they determine which mandates within the investments portfolio should be monitored versus a benchmark.**

18. *IMD management accepted recommendation 3 and stated that this recommendation pertains to the documentation of benchmarks. IMD already maintains a master list of all the current benchmarks. These benchmarks are valued daily and performance attribution reports are generated by valuing benchmarks and portfolio regularly. During the exit conference, IMD communicated its view to OIOS and OIOS agreed that benchmarks are maintained. IMD has agreed to document the list of benchmarks in the Investment Manual. Recommendation 3 remains open pending confirmation that the benchmarks in use by IMD are documented in the Investment Manual.*

### Benchmark review process

19. Historically, IMD retained external consultants to perform benchmark analyses and reviews accompanied with recommended changes. These studies were performed on an ad-hoc basis (see table below). The following is a history of the external consultants IMD retained to perform benchmark studies for the Fund. The results of each were discussed at subsequent Investment Committee meetings.

Consultant	Date of study
WM Company	June 1994
Frank Russell Company	September 1999
Deloitte & Touché	June 2005
Mercer Consulting	May 2006

20. Policy benchmarks evolved as a result of the recommendations made by the various external consultants IMD retained to perform the benchmark analyses. Both the fixed income benchmark and the real estate benchmark are being revised.

21. IMD does not have a documented policy and process for selecting benchmarks. The lack of a methodology for selecting and reviewing the appropriateness of benchmarks poses a risk that the UNJSPF benchmarks may become obsolete and ill-suited to the asset mix/goals of the Fund.

**Recommendation 4**

**(4) IMD management should document in the Manual the governance over, and the procedure for the selection of, the portfolio benchmarks. This should encompass the ongoing evaluation of benchmarks.**

22. *IMD management partially accepted recommendation 4 and stated that IMD, from time to time does study the suitability of its benchmarks against the investment objectives; however, changing the benchmark on a frequent basis could bring reputation and strategic risk to the Fund. IMD demonstrated to OIOS the process for benchmark selection/review. It is usually done with the assistance of a consultant taking into account the results of the most recent Asset Liability Management study. Once benchmarks are selected, performance and risk attributions are done against it and it is an extremely expensive proposition to change them. IMD recommends that the current process for the benchmark review remain in place. IMD can document the current process in place in the investment manual. Recommendation 4 remains open pending confirmation that the benchmark governance and review process in use by IMD is documented in the Investment Manual.*

Performance and attribution metrics

23. IMD faces system analytics constraints, and so must rely on various data sources to produce the weekly, monthly and quarterly reports needed to document Fund performance. Because of this, analytics for certain sub-sets of the portfolio are not as robust as for others. For example, Thomson does not have the Russell 2000 and Russell 2000 Value indexes, so attribution reports cannot be run for the small cap US-Core and US-Value mandates. Similarly, attribution reports on an economic sector basis exist for equities, but not for fixed income.

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24. OIOS observed that constituent-level data was not available for the Barclays Capital Global Aggregate Index in the current systems, but is expected to be in the new software platform for risk management and attribution reporting targeted for implementation in 2010. Fixed income performance measurement and attribution is viewed mainly in terms of currency effect and asset class effect. Currently, no fixed income reports exist to identify the bottom performers in the portfolio. In the view of OIOS, the performance monitoring and measurement function would benefit from fixed income performance and attribution reports that stratify the fixed income book on a more granular basis.

#### **Recommendation 5**

**(5) IMD management should define a suite of fixed income performance and attribution reports that stratify the fixed income book on a more granular basis. IMD may consider various data cross-sections for comparison versus the benchmark.**

25. *IMD management accepted recommendation 5 and stated that OIOS is correct in its observation. The current performance evaluation tool is limited to equities, as it was implemented on an emergency basis with the assistance of Procurement Division. An RFP for the full spectrum of risk analytics is under completion. The new risk platform will be able to do performance and attribution reports for all asset classes. The risk tools IMD is considering do not have fixed income performance and attribution operational at this time and in their plans, fixed income performance and attribution is scheduled to be rolled out by the end of 2010. Recommendation 5 remains open pending OIOS review of the suite of fixed income performance and attribution reports that will be developed and implemented for use within IMD.*

#### Performance calculation requirements

26. IMD requires that any and all external asset managers, custodians and master record keepers provide only Global Investment Performance Standards (GIPS)-compliant data (GIPS compliant - ethical standards that apply to the way investment performance is presented to potential and existing clients as promulgated by the CFA Institute). However, OIOS observed that this requirement was not noted in the Investment Policy or any of the other written policies and procedures.

#### **Recommendation 6**

**(6) IMD management should ensure that the requirement for all external managers to provide Global Investment Performance Standards (GIPS) compliant data is documented as part of the investment policies and procedures, and maintain proof of the entities' compliance with this policy.**

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27. *IMD management accepted recommendation 6 and stated that IMD has instructed all of its service providers to be GIPS-compliant. All of the IMD reports are GIPS-compliant. All future service providers will be required to provide GIPS-compliant reporting. Currently, Northern Trust (NT), the Custodian & MRK, provide the performance attribution reports. IMD has NT documentation which indicates that the NT reports are GIPS-compliant. Recommendation 6 remains open pending confirmation that the GIPS compliance requirement is documented in the Investment Manual.*

#### Weekly & Quarterly monitoring

28. IMD staff members meet weekly to discuss the current market environment, tactical asset allocation and the prior week's investment performance. Also, on a weekly and quarterly basis, IMD looks at the 10 worst performing equities in each region. As the weekly meetings are less formal and generally do not involve strategic direction setting, minutes were not prepared.

29. During the quarterly meetings, IMD discusses and sets strategic direction for asset allocation and rebalancing the pension portfolio (by currency and country) in concert with the Investment Committee. Objectives for this meeting include analyzing portfolio performance, highlighting strengths and weaknesses, discussing proposed changes in portfolio strategy and or tactics, and conducting a peer review of results and outlook. Special attention is paid to best and worst performing stocks as well as out- and underperforming holdings. Minutes from the quarterly portfolio review meeting are prepared to document decisions and directional guidance.

#### **Recommendation 7**

**(7) IMD management should ensure its weekly investment review meetings are documented at a macro-level to summarize any tactical directives that may be discussed. These minutes should be distributed to the meeting participants.**

30. *IMD management accepted recommendation 7 and stated that IMD has started keeping the minutes of weekly investment meetings. IMD will be able to share these minutes in the next review. Based on the action taken by IMD, recommendation 7 has been closed.*

### **C. Investment Managers' Performance Evaluations**

#### Goals and performance expectations

31. OIOS reviewed latest available PAS for all investment officers and noted some areas that could be streamlined. On average, PAS of investment officers at the P-5 and P-4 levels had six objectives. There was only one goal that directly related to the investment portfolio's performance. In the view of OIOS, this goal appears to be broad, encompassing several objectives and does not provide clear measurement criteria. While an appropriate performance measurement

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benchmark was established for each sub-asset class, there were no criteria on measuring the investment officers' contribution towards the total overall Fund performance.

32. Further, interviews with select investment officers conducted as part of the audit showed that the main objective of achieving a positive total return performance was vague and may be unclear to the staff members how this goal would be measured. Other weaknesses associated with the performance evaluation exercises included: (a) PAS were not completed for all investment officers and assistants; (b) the evaluations in general were not supported by sufficient documentation; (c) appraisals were not completed on a timely basis; (d) it was unclear how the staff member would be held accountable for poor investment decisions or performance, and (e) the end of cycle appraisal was not structured and aligned with the established goals as they were not fully documented in the evaluation comments.

33. The longer-term performance of the portfolio is not included as part of the work plan objectives for investment officers. To function effectively in performance evaluation, the performance relating to long-term goals and achievements, i.e., over a two-year period or more, should be consistently included in the investment officers' PAS.

34. IMD holds a portfolio review meeting at the end of every quarter to review the performance of the Fund. However, the results of these meetings were not documented to provide a formal record of investment officers' performance throughout the appraisal period.

#### **Recommendation 8**

**(8) IMD management should develop clear performance goals for the Performance Appraisal System (PAS) and measurement criteria, including measurement of contributions to the longer-term fund performance. PAS goals of personnel directly involved in investment management should be more focused on the performance of their assigned portfolios and security selections. This may be supported with an evaluation document to track the individual investment officer performance throughout the PAS period.**

35. *IMD management accepted recommendation 8 and stated that this is a far-reaching recommendation and prerequisites for achieving this are still in the implementation phase. IMD is in the process of implementing the risk platform which is required to roll out risk budgeting methodology. Recommendation 8 remains open pending confirmation of the implementation of relevant PAS performance goals and measurement criteria for the investment officers.*

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## D. Risk Management Policies and Practices

### New portfolio risk management and performance reporting platform

36. IMD is in the process of identifying a new risk management and attribution reporting platform, (as of early July 2009, IMD was completing the review of submitted proposals and will select two for consideration by the Procurement Office) and intends to implement a platform that has the capability of handling analytics for all current and future asset classes that IMD may invest in, including (but not limited to) derivatives, commodities and alternative assets.

37. The new platform is intended to facilitate IMD's ability to monitor its investments versus a benchmark, assess tracking error on an ongoing basis and more clearly signal when diverging from a benchmark. It is thus believed by management that with the implementation of such a platform, IMD would be able to recognize in a timely manner a need for follow-up benchmark analyses.

### Pricing variance thresholds/triggers

38. Daily automated reconciliation reports for fixed income are in place to identify pricing differences between IMD and Northern Trust. OIOS examined two holdings reconciliations reports for 14 and 15 July 2009 to confirm that this process is being performed. The following variance thresholds are used when comparing equity portfolio returns with index returns for both Northern Trust data and Thomson data. The IMD Risk Officer investigates differences exceeding these thresholds:

Region	Variance threshold +/-
US/Canada	5 bps
Japan	10 bps
Europe	10 bps
Emerging markets	> 20 bps

39. The control process to identify and resolve pricing discrepancies appears effective; however, neither the thresholds nor the process are supported with formal policy and procedure. IMD explained that automated reconciliations are to be performed, and exception reports will be produced, within the new platform. To the extent that it becomes prudent to reset any of the thresholds, the exception reports would facilitate the establishment of the thresholds.

### **Recommendation 9**

**(9) IMD management should formally document the thresholds for analyzing portfolio returns with index returns and include the documentation of these thresholds within the Investment Policy and Procedures Manual.**

40. *IMD management accepted recommendation 9 and stated that IMD currently uses thresholds for analyzing portfolio returns and once those thresholds are breached, IMD investigates them. These thresholds are not*

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*formally documented in the Investment Manual at this time. IMD agrees to document these thresholds in the Investment Manual. Recommendation 9 remains open pending confirmation by management that the policy manual has been enhanced as discussed and published.*

## **V. ACKNOWLEDGEMENT**

41. We wish to express our appreciation to the Management and staff of the Investment Management Division for the assistance and cooperation extended to the auditors during this assignment.

## STATUS OF AUDIT RECOMMENDATIONS

Recom. no.	Recommendation	Risk category	Risk rating	C/O <sup>1</sup>	Actions needed to close recommendation	Implementation date <sup>2</sup>
1	IMD management should document its investment performance monitoring and measurement policy in the Investment Policy and Procedures Manual to provide more background and detailed guidance on investment reporting, monitoring and evaluation, to serve as a reference point for investment officers and as an internal control tool.	Governance	Medium	O	Confirmation by management that the policy manual has been enhanced as discussed and published.	31 Dec 2009
2	IMD management should formalize the performance monitoring and reporting process with written desk procedures, and strengthen the process wherever possible in terms of security, report validation and data integrity.	Operational	Medium	O	Confirmation by management that the detail desk procedures have been enhanced as discussed and published.	31 Dec 2009
3	IMD management should maintain a master list of benchmarks utilized for all aspects of its portfolio within the Investment Policy and Procedures Manual. Further, IMD Management should document the parameters by which they determine which mandates within the investments portfolio should be monitored against a benchmark.	Governance	Low	O	Confirmation that the benchmarks in use by IMD are documented in the Investment Manual.	31 Dec 2009
4	IMD management should document in the Manual the governance over, and the procedure for the selection of, the portfolio benchmarks. This process should encompass the ongoing evaluation of benchmarks.	Operational	Medium	O	Confirmation that the benchmark governance and review process in use by IMD is documented in the Investment Manual.	31 Dec 2010
5	IMD management should define a suite of fixed income performance and attribution reports that stratify the fixed income book on a more granular basis. IMD should consider various data cross-sections for comparison against the benchmark.	Operational	High	O	OIOS review of the suite of fixed income performance and attribution reports that will be developed and are implemented for use within IMD.	31 Dec 2010
6	IMD management should ensure that the	Governance	Low	O	Confirmation that the GIPS compliance	31 Dec 2009

Recom. no.	Recommendation	Risk category	Risk rating	C/O <sup>1</sup>	Actions needed to close recommendation	Implementation date <sup>2</sup>
7	requirement for all external managers to provide GIPS compliant data is documented as part of the investment policies and procedures, and should maintain proof of the entities' compliance with this policy. IMD management should ensure that weekly investment review meetings are documented and summarize any tactical directives that may be discussed. These minutes should be distributed to the meeting participants.	Operational	Medium	C	requirement is documented in the Investment Manual.	Implemented
8	IMD management should develop clear performance goals for the Performance Appraisal System (PAS) and measurement criteria, including measurement of contributions to the longer-term fund performance. PAS goals of staff directly involved in investment management should be more focused on the performance of their assigned portfolios and security selections. This should be supported with an evaluation document which tracks the individual investment officer's performance throughout the PAS period.	Human Resources	Low	O	Confirmation of the implementation of relevant PAS performance goals and measurement criteria for the investment officers.	31 Dec 2011
9	IMD management should formally document the thresholds for analyzing portfolio returns with index returns and include the documentation of these thresholds within the Investment Policy and Procedures Manual.	Operational	Medium	O	Confirmation by management that the policy manual has been enhanced as discussed and published.	31 Dec 2009

1. C = closed, O = open

2. Date provided by IMD in response to recommendations.