

INTERNAL AUDIT DIVISION

REPORT 2023/027

Audit of selection and use of brokers and counterparties in the Office of Investment Management of the United Nations Joint Staff Pension Fund

There is need to consolidate and formalize the procedures for brokerage services and trade execution, strengthen vetting and monitoring of brokerage firms' creditworthiness, regularly review commission rates, and conduct broker performance voting more timely

1 August 2023 Assignment No. AS2023-801-01

Audit of selection and use of brokers and counterparties in the Office of Investment Management of the United Nations Joint Staff Pension Fund

EXECUTIVE SUMMARY

The Office of Internal Oversight Services (OIOS) conducted an audit of selection and use of brokers and counterparties in the Office of Investment Management (OIM) of the United Nations Joint Staff Pension Fund (UNJSPF). The objective of the audit was to assess the adequacy and effectiveness of governance, risk management and control processes pertaining to selection and use of brokers and counterparties in OIM. The audit covered the period from January 2020 to May 2023 and included a review of: (i) governance and policy framework; (ii) vetting and monitoring of brokers and counterparties; (iii) selection of brokers and counterparties for trading; and (iv) performance evaluation of brokers and counterparties.

The audit found the need to consolidate and formalize the procedures for brokerage services and trade execution, strengthen vetting and monitoring of brokerage firms' creditworthiness, regularly review commission rates, and conduct broker performance voting more timely.

OIOS made six recommendations. To address the issues identified in the audit, OIM needed to:

- Consolidate all procedural documents on brokers/counterparties into one formal procedure; define in the procedure the proactive actions to be taken, and the related responsibilities in case a broker or counterparty experiences financial distress or is acquired by another entity; and update, formalize and circulate the standard operating procedures for fixed income and foreign exchange trading;
- Strengthen the vetting of new brokers and counterparties and the ongoing monitoring of their financial health and creditworthiness by improving its assessment and monitoring methodology;
- Commission a study to evaluate the various transaction cost analysis solutions and providers to enhance the measurement of trade execution performance for fixed income and foreign exchange;
- Institute a mechanism to periodically review the reasonableness of the commission rates paid by the Fund to the brokers in various markets;
- Entrust the Risk Team to: conduct a quarterly review of the weekly reports of trades for which the default commission rate was not applied to assure appropriate justification for the deviations; and submit a summary of the review results to the Best Execution Committee; and
- Rationalize the weight allocation to trading-related services for equity broker performance voting and complete the annual broker performance voting in February of each year to guide commission allocation.

OIM accepted the recommendations and has initiated action to implement them. Actions required to close the recommendations are indicated in Annex I.

CONTENTS

I.	BACKGROUND	1-2
II.	AUDIT OBJECTIVE, SCOPE AND METHODOLOGY	2-3
III.	AUDIT RESULTS	3-11
	A. Governance and policy framework	3-5
	B. Vetting and monitoring of brokers and counterparties	5-6
	C. Selection of brokers and counterparties for trading	6-7
	D. Performance evaluation of brokers and counterparties	7-11
IV.	ACKNOWLEDGEMENT	11

- ANNEX I Status of audit recommendations
- APPENDIX I Management response

Audit of selection and use of brokers and counterparties in the Office of Investment Management of the United Nations Joint Staff Pension Fund

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of selection and use of brokers and counterparties in the Office of Investment Management (OIM) of the United Nations Joint Staff Pension Fund (UNJSPF).

2. UNJSPF was established in 1949 by the General Assembly to provide retirement, death, disability, and related benefits for the staff of the United Nations and other international intergovernmental organizations admitted to the membership of UNJSPF. Under the authority of the Secretary-General, the Representative of the Secretary-General (RSG) for the investment of the assets of the Fund has a fiduciary responsibility to manage the investments in the best interests of the Fund's participants and beneficiaries. The Fund's investments managed by OIM amounted to \$83.1 billion as of 2 June 2023, allocated across various asset classes as shown in Table 1. The Fund's long-term investment objective is to meet or exceed a 3.5 per cent real return. Table 2 shows the annualized nominal returns adjusted for inflation as measured by the United States Consumer Price Index (US CPI) to derive real returns over various time horizons as of 31 March 2023.

Asset class	Market value (United States dollars)	% of total	Target Strategic Asset Allocation (%)
Public Equities	42,689,441,243	51.37	53
Private Equity*	6,905,790,361	8.31	7
Real Estate*	7,101,912,753	8.55	8
Real Assets*	378,495,062	0.46	1
Fixed Income	24,415,646,290	29.38	29
Cash and Equivalents	1,613,641,039	1.99	2
Total	83,104,926,748	100	100

	Table 1: UNJSPH	asset value and	allocation as	of 2 June 2023
--	-----------------	-----------------	---------------	----------------

* Results are preliminary due to delays in receiving final valuation for private market investments.

	Rate of return (%)								
	1 year	2 years	3 years	5 years	10	15	20	25	50
					years	years	years	years	years
UNJSPF nominal return	-5.7	-0.8	9.2	5.2	6.2	5.1	7.4	6.2	8.1
US CPI (inflation rate)	5	6.7	5.4	3.9	2.6	2.3	2.5	2.5	4
UNJSPF real return	-10.2	-7	3.7	1.3	3.5	2.7	4.8	3.6	4
Excess real return (over 3.5% real return objective)	-13.2	-10.2	0.2	-2.2	0	-0.8	1.2	0.1	0.5

3. Like other institutional investors, OIM uses brokerage firms to trade public equities, fixed income and foreign exchange. Buying and selling of public equities is conducted through "agency trading" where a broker finds a counterparty to the customer's trade, which can include customers of other brokers. The brokers execute the trades at various venues (stock exchanges) and electronic platforms. OIM pays commission fees for the trading service. Brokers provide other services to help the Fund manage its portfolios, such as investment research and corporate access through which OIM can meet with the management team of investee companies and attend various conferences. In comparison, buying and selling of fixed income securities and currencies is done through "principal trading" where a broker completes a customer's trade using their own inventory. As they act as the other party of a trade, a broker for fixed income and foreign exchange transactions is accordingly referred to as "counterparty". Principal trading allows the dealers to profit from the bid-ask spread, i.e., the difference between buy and sell prices, and no separate commissions are charged.

4. In 2013, OIM established a Trade Execution Team (Trading Team or Trading Desk) for public equities. The portfolio managers for the four regional equity portfolios initiate the trades in the trade order management system, and the Trading Team selects and works with one or more brokers to execute the trades. The team is currently composed of five staff members (one P-4, three P-3, one G-7) and reports to the Deputy Director for Investments for Public Equities. As there is no resource dedicated to trading of fixed income securities and currencies, the portfolio managers execute the trade orders themselves. The investment officer in charge of the investment cash portfolio is also responsible for buying or selling currencies to fund other types of investments and pension payments. Chart 1 shows annual trading volume of public equities and fixed income during the period 2020-2022. Chart 2 shows the commissions paid every year by the four regional equity portfolios during the same period.



Chart 1: Trading volume per year during





5. OIM also established in 2013 a Brokerage Committee to oversee the performance and services of its brokers and counterparties in seeking best execution, i.e., to obtain the best execution prices to maximize the return of the Fund. The Committee was renamed as Best Execution Committee in 2018. Guided by a set of formal terms of reference, it is currently chaired by the Chief Investment Officer and composed of directors and portfolio managers of public securities and fixed income, as well as representatives of the Risk, Operations and Business Applications teams. The Committee holds quarterly meetings to review the selection, use and performance of brokers and counterparties.

6. Comments provided by OIM are indicated in italics.

II. AUDIT OBJECTIVE, SCOPE AND METHODOLOGY

7. The objective of the audit was to assess the adequacy and effectiveness of governance, risk management and control processes pertaining to selection and use of brokers and counterparties in OIM.

8. This audit was included in the 2023 risk-based work plan of OIOS due the risks and costs associated with the use of brokers and counterparties in OIM.

9. OIOS conducted this audit from January to April 2023. The audit covered the period from January 2020 to April 2023. Based on an activity-level risk assessment, the audit covered risk areas areas relating to: (i) governance and policy framework; (ii) vetting and monitoring of brokers and counterparties; (iii) selection and use of brokers and counterparties for trading; and (iv) performance evaluation of brokers and counterparties.

10. The audit methodology included: (a) interviews with key personnel; (b) review of relevant documentation; (c) data analysis; (d) observation of meetings; and (e) sample testing.

11. The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

III. AUDIT RESULTS

A. Governance and policy framework

Efficiency and effectiveness of the Best Execution Committee's meeting could be further improved

As noted from the meeting minutes and meetings observed by OIOS in February and April 2023, 12. the Best Execution Committee's guarterly meetings followed a standard agenda and modality. The Trading Team presented public equities' trading volume and commissions paid to various brokers for the four regional portfolios during the current quarter compared with commission budgets, as well as similar information for the previous quarter and the same quarter of the previous year. The team also reported to the Committee the use of the research budget, i.e., payments made to investment research providers, established through the commission recovery programme¹. Similarly, the Fixed Income team presented fixed income and foreign exchange trading volume and allocation of trades among the approved counterparties as well as transaction cost analyses (TCA). A simple qualitative evaluation of all brokers and counterparties was indicated in the presentation to the Committee, either as "satisfactory", "unsatisfactory" or "not applicable²" for portfolio management services and trading services provided during the period. Cases were occasionally made by equity and fixed income teams to add a new broker or counterparty to the approved lists. Brief explanations were verbally provided at the Committee's meetings for significant changes of trading volume and commissions paid, and deviations from commission budgets. Actions taken or required to be taken to improve trade execution performance were rarely discussed, especially on the TCA results for fixed income and foreign exchange.

13. In 2020, some members of the Committee requested OIM to make the quarterly meetings more efficient. Accordingly, measures were taken to limit the presentation of TCA results for equities to only an executive summary, and the meeting duration was considerably reduced. OIOS was informed that OIM was considering separating the meetings for public equities and fixed income. OIOS is of the view that the modality of the meetings could be modified to make them more efficient and effective by skipping the read-out of the slides and focusing on: (i) the causes for significant changes above certain thresholds during the

¹ A mechanism through which a portion of the commissions paid to equity brokers is contributed to a pool, which in turn is used to pay investment research providers.

² For brokers and counterparties to which no trade was allocated during the period, OIM implemented the recommendation of the Board of Auditors to mark such cases as "not applicable".

quarter; and (ii) actions taken or to be taken to improve trade execution or other services from brokers and counterparties, especially during the Committee's meeting to review trade execution of the fourth quarter and the whole year. OIM agreed to review the modality of the Committee's meetings to enhance its effectiveness.

Need to update, consolidate and formalize procedures on brokerage and trade execution

14. In February 2019, OIM promulgated a formal Brokers/Counterparties Procedure to define the process and standards for adding new brokers and counterparties for public equities, fixed income and foreign exchange. Inter alia, the procedure provides the form to be filled out by investment officers to request adding new brokers/counterparties to the approved lists. It also requires the Risk Team to vet the new brokers/counterparties before approval by the Risk Committee. A list of approved brokers for public equities and their commission rates³ at the time was attached to the procedure, but not the approved counterparties for fixed income and foreign exchange. In May 2019, OIM developed a project document titled 'Broker Voting Configuration and Process' to implement the broker voting functionality (BVOT) within the trade order management system. The existing and future processes for evaluating performance of equity brokers were described in detail. Approved brokers for various regions were listed, but there were discrepancies compared with those in the Brokers/Counterparties Procedure. This project document was not signed off by the RSG as a formal procedure. Another document titled the 'Broker Voting Business Requirements for Integration' was drafted for a project completed in 2021 to further automate the exporting, storing and transformation of broker voting results as well as uploading to Power BI.

15. OIOS noted that some provisions in these documents need to be reviewed and updated. For instance, according to the Brokers/Counterparties procedure, the Risk Team should undertake quarterly reviews comparing the list of approved brokers/counterparties as well as their respective pre-approved commission rates to the previous quarterly rates to highlight significant discrepancies to the Risk Committee. This control was never implemented. The BVOT project document requires semi-annual voting by all teams whereas in practice, only the voting at the beginning of the year was mandatory for setting commission budgets; the mid-year voting was optional.

16. There was a lack of procedural guidance on how to manage situations where OIM finds out that a broker or counterparty is experiencing serious financial distress, or is being acquired by another firm. In March 2023, a large international bank which served as a broker for equities and a counterparty for fixed income for OIM collapsed after a series of major losses and capital outflow. It was subsequently acquired by a rival bank. In the absence of procedural guidance, the Trading Team inquired during the Best Execution Committee meeting on 27 April 2023 as to whether they should continue to trade with the collapsed bank while it was going through the acquisition process.

17. A complete set of procedural guidance on brokerage should also cover how to achieve best execution, including controls and practices to be implemented and followed when selecting individual brokers and counterparties to execute trades. OIM developed two standard operating procedures (SOPs) for fixed income and foreign exchange trade execution in 2018. The SOPs describe, inter alia, the means to achieve best execution under various circumstances, including when to use electronic trade and when to work with a counterparty "over the counter⁴", using phone or messaging. The SOPs also prescribe requirements to choose a minimum of three counterparties for electronic execution, and to attach the All

³ Including commission rates applied before the review in 2019 conducted by OIM and the revised commission rates after the review.

⁴ A decentralized market in which the participants trade stocks, bonds, currencies or other instruments directly, without a central exchange or broker.

Quotes page from the trade order management system to the trade ticket for currency trading. Commonly referred to as "ALLQ page or screen", it is used to evidence best execution as the quotations from various dealers around the execution time are captured. However, these SOPs remained as drafts and were yet to be reviewed and approved by OIM. The SOP for fixed income trading also needed to spell out best practices to achieve best execution for the sub-asset classes considering their unique market characteristics and the need to attach the ALLQ screen.

(1) OIM should: (i) consolidate all procedural documents on brokers/counterparties into one formal procedure; (ii) define in the procedure the proactive actions to be taken, and the related responsibilities in case a broker or counterparty experiences financial distress or is acquired by another entity; and (iii) update, formalize and circulate the standard operating procedures for fixed income and foreign exchange trading.

OIM accepted recommendation 1.

B. Vetting and monitoring of brokers and counterparties

Need to strengthen the due diligence and ongoing monitoring of the brokers and counterparties

18. The Brokers/Counterparties Procedure stipulates that "the Risk Team will perform the due diligence process by reviewing the credit quality and financials of the new broker/counterparty as well as any disciplinary history or significant litigation." However, there was no explanation on how to do it, except that the OIM Broker/Counterparty Request Form had to be signed by the Head of Risk & Compliance after vetting by the Risk Team of credit quality, financials, disciplinary history, and significant litigation. In practice, the Risk Team checked the current ratio, amount of cash, net capital, and net capital ratio using data from the published financial statements of the new brokerage firms. For those based in the United States, the Risk Team obtained and reviewed the Financial Industry Regulatory Authority⁵ reports, which consisted of the firm's corporate background and history, disciplinary actions taken by regulators against them, and significant litigations.

19. Overall, the approach taken relied mostly on historical data; there was a lack of dynamic review of the business, financial and risk prospects of brokerage firms. For two of the five cases reviewed in 2022, the assessment was based on financial statements dated more than a year ago. Once the brokers and counterparties were on-boarded, there was no systematic monitoring by the Risk Team of their financial health and creditworthiness except for their credit ratings. The Risk Team was not equipped with resources to carry out more comprehensive review and monitoring because it had only one credit risk officer (P-3). Historical and recent failures of financial institutions have proven that their financial health and creditworthiness can deteriorate so quickly that even credit rating agencies and regulators may fail to detect them early enough. Therefore, it requires more robust and systematic approaches to do so.

20. The equity teams had officers dedicated to cover the financial sector (to which the brokerage firms/banks belong) much more closely, using more recent data and more sophisticated analytics to detect emerging risks. For instance, the North America Public Equities Team successfully identified the risks with one major regional bank in the United States and recommended to sell off the Fund's holdings of the bank's shares more than a month before the crisis became full-blown in March 2023. The risk was detected in advance due to in-depth analysis of the bank's quarterly earnings report instead of annual financial statements, as well as the use of other customized analytics for the banking sector. In contrast, the rating

⁵ A private corporation that acts as a self-regulatory organization for member brokerage firms and exchange markets.

agency that covered the bank only downgraded its credit rating after the crisis became public, two days before the bank was taken over by the government.

(2) OIM should strengthen the vetting of new brokers and counterparties and the ongoing monitoring of their financial health and creditworthiness by improving its assessment and monitoring methodology.

OIM accepted recommendation 2 and stated the vetting of new brokers and counterparties should be strengthened through the ongoing monitoring of the financial health and creditworthiness of the brokers and counterparties using independent external resources.

C. Selection of brokers and counterparties for trading

Need to enhance TCA for fixed income and foreign exchange trading

21. Selection of brokers and counterparties to execute individual trades must ensure best execution, i.e., obtain the best possible prices taking into consideration the type of security to be traded, size of the order, market liquidity, and relative strengths of brokers and counterparties in various markets. For equities, the Trading Team also has to ensure that the allocation of trades over time is in line with the commission budgets for the four regional portfolios. There are financial service providers that have developed advanced tools to systematically measure trade execution quality by comparing execution prices against various benchmarks, for instance, the market price when a specific order reaches the market (arrival price). The difference between the execution price and arrival price is an indicator of the implicit transaction cost or execution quality/performance.

22. OIM started using a tool from the trade order management system vendor (Vendor A) in 2018 to perform TCA for public equity trades. Due to the limitations of the tool, such as inflated performance and insufficient analytics, OIM in early 2019 switched to a different vendor (Vendor B) which is a well-established TCA service provider. The original annual cost of the service was increased from \$50,000 to \$60,000 after the pre-trade analysis function was subsequently added. The ability to conduct pre-trade analysis is particularly valuable when executing large programme or basket trades⁶ for implementing strategic and tactical asset allocation because the Fund can work with the broker(s) to optimize the trading strategy to save costs. The vendor presented quarterly TCA reports to OIM during the Best Execution Committee meetings, mainly using two industry-standard indicators. The reports showed granular analytics by portfolio, broker and trader (member of the Trading Team). According to the reports, OIM's trade execution in general compared favourably to market level. The Trading Team used the analyses to work with brokers to improve their performance when necessary. Aided by the analyses, OIM also improved trading instructions to brokers for better execution.

23. The Fixed Income Team also started using the TCA tool from Vendor A in 2020 because it was embedded in the order management system. The Team has been regularly presenting the TCA results generated from the system at the Best Execution Committee's meetings. The reports indicate that the long-term fixed income and investment cash portfolios had an average quarterly gain of \$387,306 per quarter during the period from 2020 to 2022. However, for three quarters of 2022, the performance was negative, i.e., trade execution resulted in losses relative to market prices. For the whole year of 2022, trading cost exceeded -\$4 million, or -1.37 basis points. Foreign exchange trading showed positive performance (savings) relative to two different benchmarks in all the quarters of 2022. Considering the lack of a commission budget for fixed income and less transparency with over-the-counter trades, OIOS tested a

⁶ A basket trade is to buy or sell a large number of different securities at the same time.

sample of 40 transactions covering sovereign debt, mortgage-backed securities, corporate bonds, and foreign exchange. Based on the review, OIOS concluded that those trades generally achieved best execution considering their unique circumstances.

24. Nonetheless, using an effective tool is the industry best practice to continuously measure and monitor execution quality in a systematic way. OIOS noted that Vendor A was ordered to pay a fine of \$5 million by the Securities and Exchange Commission of the United States in January 2023 for misleading disclosures about its valuation methodologies for fixed income securities. Although fixed income valuation is not directly related to TCA services, the incident undermined Vendor A's credibility as a service provider. Besides, while Vendor A is an industry leader in providing market data, it is not recognized as one of the best TCA providers according to an organization that evaluates and ranks service providers in the financial industry on an annual basis. Considering all these factors, OIOS is of the view that there was a need to commission a comprehensive study to test various TCA solutions and systems by using OIM trading data to make an informed decision on the best option.

(3) OIM should commission a study to evaluate the various transaction cost analysis solutions and providers to enhance the measurement of trade execution performance for fixed income and foreign exchange.

OIM accepted recommendation 3.

D. Performance evaluation of brokers and counterparties

Need to institute a mechanism to review commission rates periodically

25. While OIM regularly monitored the amount of commissions paid for the various portfolios and the Fund as a whole, there was a need to periodically review its commission rates to ensure that they continue to be reasonable relative to the market, considering that commission rates fluctuate over time and have historically indicated a downward trend.

26. OIOS noted that the commission rates were last reviewed by OIM against the market rates provided by a financial firm in early 2019. Following the review, OIM was able to reduce the commission rates to the then lowest rates for emerging markets by as much as 60 per cent in some cases. Commission rates for all brokers for North America were cut from 5 to 4 cents per share (cps), and from 30 or 25 to 20 basis points (bps) for Asia-Pacific developed markets excluding Japan. European developed markets and Japan were the only markets that saw no change. Apart from achieving substantial savings, the rate reduction also resulted in harmonization of commission rates whereby OIM began to pay the same rate for all brokers for the same market/country.

27. The Trading Team of OIM recently received an updated report from the same financial firm with commission rates paid by 236 institutional investors worldwide in various markets in 2022 (see Table 3). The firm also reported a modest decrease of commission rates across the developed and emerging markets in recent years. There was additional breakdown commissions data and analytics for individual markets that could potentially serve as useful benchmarks for in-depth analysis. At the time of the audit, OIM was yet to explore making further use of the report.

	Market	rates	OIM commiss	OIM full-service	
Region	High touch ⁷ execution-only ⁸	High touch bundled	Programme/ basket trading*	Full-service	rates - market rates
United States (cps)	1.60	3.60	1.00	4.00	0.40
Canada (bps)	1.60	3.50	1.00	4.00	0.50
APAC ex-Japan (bps)	7.20	15.55	5.00	20.00	4.45
Japan (bps)	6.30	13.40	5.00	15.00	1.60
Europe ex-UK (bps)	6.25	13.93	5.00	10.00	-3.93
United Kingdom (bps)	5.90	13.30	5.00	10.00	-3.30
Emerging Markets (bps)	11.95	20.50	10.00	20.00	-0.50
China	8.75	15.35	10.25	20.00	4.65

Table 3: UNJSPF commission rates versus 2022 market commission rates

* OIM did not have execution-only brokers. The rates paid for programme or basket trading can be viewed as proxies of execution-only rates.

28. As shown in Table 3, while it appears that OIM has obtained lower commission rates for programme trades than the execution-only market rates, the two rates are not directly comparable because the latter requires significant involvement of a trader (high touch) on the broker side. For regular trades, the Fund was paying higher full-service rates in North America and Asia-Pacific but lower rates in Europe. Although the commission rates being paid in emerging markets in aggregate were on par with the market level, the Fund was paying significantly higher rates for China, which is the largest emerging market and accounts for roughly 30 per cent of the Fund's benchmark index for emerging markets.

29. Considering the above, OIOS is of the view that OIM needs to institute a mechanism involving the trading desk and the portfolio managers to review the reasonableness of commission rates paid in various markets and for various types of trades periodically, say, every three to five years, against market data. A peer group could be identified for more effective benchmarking. Such reviews do not have to always result in reduction of commission rates but can provide visibility and assurance that OIM is not overpaying for the services relative to its peers. Portfolio managers can potentially leverage the review results to negotiate with brokers for better services and make informed decisions on commission rates by taking into consideration all relevant factors. Rationale for keeping or adjusting the commission rates need to be documented and reported to the Best Execution Committee.

(4) OIM should institute a mechanism to periodically review the reasonableness of the commission rates paid by the Fund to the brokers in various markets.

OIM accepted recommendation 4.

Changes to commission rates need to be reviewed by the Risk Team

30. OIM's Middle Office (a team under Operations) is responsible for setting up broker commission in the trade order management system based on the instruction of the Trading team. Both teams can make

⁷ High touch means a method of executing a client order using a trader who will monitor the market and subsequently execute that order on one or more venues. This strategy requires greater human intervention.

⁸ Execution-only is a brokerage model that only involves taking orders and executing them, without any further services such as research, banking, or advice. On the contrary, bundled or full-service rates have the additional services built in.

changes to commission rates but usually, the Trading Team requests the Middle Office to do so if many trades will be impacted. Default commission rates in the system were updated following the comprehensive review of commission rates. In addition, the two teams often changed the default rates on a temporary basis to facilitate special trades to which different rates applied, such as programme trades. Upon completion of such trades, the rates were changed back to the default rates in the system, unless the change was for one-time use for certain unique transactions, for instance, secondary placements⁹. There was no systematic audit trail of the changes kept by the system, i.e., one cannot generate a report of changes made during a period but can only review the individual trade tickets to determine if a different rate was applied. To mitigate this systemic limitation, the Middle Office has been generating a report of individual trades on a weekly basis to identify changes in commission rates and determine whether they were justified. OIOS' review of five sample weekly reports indicated that the changes in commission rates made during those five weeks were all captured and reviewed by the Middle Office.

31. OIOS conducted a comprehensive review of the commissions paid during 2020-2022 and noted that the default commission rate in the system was not applied to compute the commissions for 1,280 of the 21,325 trades in total. Table 4 provides a breakdown of those trades and the reasons for not applying the default commission rate.

Categories	tegories Number of transactions Paid?		Notes
Programme trades	1,204	Lower	Programme trade commission rates as shown in Table 3 were used.
Generic rate for Emerging Markets used	20	Lower	No specific commission rate was set up before 28 July 2022 for an Emerging Market with one broker; the generic rate for Emerging Markets (20 bps) was applied. The default rate was changed to 25 bps afterwards.
Internal coding error	17	Higher	The Middle Office in February 2021 detected four trades for which 5 cps were applied instead of the default rate of 4 cps but assumed it was agreed upon between the Trading Team and the broker. Another 13 of such trades were detected in May 2021. The incorrect coding in the system by the Front Office was then identified and fixed. A total of \$15,830 was overpaid for the 17 trades but not recovered because it was accepted as an internal error.
Broker error	5	Lower	Due to the recognition of an operational error by the broker for the trades, commissions were waived for the five trades.
Secondary placements	24	Mixed	For 17 trades, the broker that allocated the shares of secondary placements dictated a commission rate of 11 or 12 bps while the default rate was only 10 bps. For 7 other trades, no commission was paid.
One-off Emerging Market trades	6	Higher	The large trade was executed over six days on a different exchange. A one-time commission of 30 bps was paid instead of 20 bps.
Exchange-Traded Funds ¹⁰	xchange-fraded 4 III 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		3 cps instead of 1 cps was paid because the Funds were traded on an electronic platform and the broker committed its own capital to facilitate the trades to execute them on the same day when the order was placed.
Total	1,280		

Table 4: Equity trades during 2020-2022 for which the default commission rate was not applied

32. As shown in Table 4, majority of changes in commission rates led to applying lower programme trade rates when OIM executed a large number of trades to rebalance the investment portfolio. OIOS' review indicated that correct programme trade rates were used. OIOS also concluded that the different rates

⁹ Subsequent issuance of new stocks following initial public offering.

¹⁰ Stock-like instruments issued by funds that own many other stocks.

applied for other types of trades were in general reasonably justified, including those for which a higher rate was applied. The only exception was the internal coding error described in Table 4, which could have been detected and addressed in February rather than May 2021 if the review was more rigorous.

33. As mentioned earlier, the Brokers/Counterparties Procedure of 2019 requires the Risk Team to review the brokers used and the commission rates applied during a quarter as compared to those in the previous quarter. However, this control was never implemented, despite a recommendation from the Board of Auditors in 2021.

34. OIOS is of the view that the control could be modified to be more effective and easier to implement, taking into consideration the nature of the underlying risk and mitigating controls already in place. Since the risk is overpayment of commissions due to application of higher rates without proper justification, the control should be designed to identify the trades for which the default rate was not applied, especially those for which the commission rate was higher. Since the Middle Office was already reviewing trades with changed commission rates on a weekly basis, there is only a need for the Risk Team to review those weekly reports and the supporting documentation compiled by the Middle Office to ensure their completeness and proper justification for the changes, especially the rate increases. The review by the Risk Team is to provide independent assurance because both the Trading Team and the Middle Office can amend the commission rates in the system. A summary of the review results needs to be submitted to the Best Execution Committee instead of the Risk Committee, considering the matter is within the former committee's purview.

(5) OIM should entrust the Risk Team to: (i) conduct a quarterly review of the weekly reports of trades for which the default commission rate was not applied to assure appropriate justification for the deviations; and (ii) submit a summary of the review results to the Best Execution Committee.

OIM accepted recommendation 5.

Broker performance evaluation needs to be refined and conducted in a timely manner

35. In 2018, OIM started developing a methodology to systematically evaluate the performance of brokers. In 2019, a project was initiated to utilize the BVOT system to conduct voting on brokers' performance¹¹. As mentioned earlier, the voting methodology and process was described in the project document. According to the methodology, a weight of 90 per cent is allocated to portfolio management services including corporate access, research and sales, and 10 per cent is allocated to trading-related services. The four regional equity teams allocated different weights to the three types of portfolio management services. The voting results, either in points or stars, were converted to percentages for brokers for the same market using a methodology embedded in the BVOT system. The percentages would then serve as budgets to allocate trades and commissions. This methodology also serves as a feedback and reward mechanism for high-performing brokers. For example, if there were five brokers for one country, based on the voting, they could each hypothetically receive 25, 22, 20, 18 and 15 per cent of total commissions from OIM, respectively, for that market in the next cycle.

36. OIOS reviewed the voting results by the various teams for 2020 and 2021 and noted that the documented methodology was consistently followed, and that the Operations Team correctly summarized and exported the results. However, the 10 per cent weight allocated to four sub-categories of trading-related services appeared to be too insignificant to make a difference. In other words, the ranking of brokers by voting results would rarely change if the voting by the Trading Team was completely excluded, with equally

¹¹ Since no commission was paid for fixed income and foreign exchange trading and hence no commission budget set, the Fixed Income Team continued to evaluate the counterparties only in qualitative way.

minimal impact on the commission budget. OIOS recognizes that OIM values the portfolio management services much more because successful portfolio management is expected to have a greater impact on portfolio performance than transaction cost in the long run. However, the insignificant weight for trading services could potentially weaken brokers' incentive and OIM's leverage over them to improve the quality of trading services. Furthermore, the 90 to 10 weight allocation is not aligned with the costs of the services, i.e., the composition of the commission rates. For instance, OIM's current full-service and execution-only commission rates for North America were 4 and 1 cents per share, respectively, viz., 25 per cent of the commissions paid were for trading services and the rest were for portfolio management services. As shown in Table 3, approximately one-third to half of the commissions paid were for trade execution for other markets. Therefore, OIOS is of the view that OIM needs to review the broker performance voting methodology by potentially benchmarking against a peer group to determine whether the weight allocation to trading services should be increased to at least, say, 20 per cent.

37. Since one of the main objectives of conducting broker performance evaluation using voting is to set commission budgets for the next cycle, the evaluation of brokers should be completed as early as possible when a year ends. However, for the past three years, the broker voting results were only finalized in April. As a result, commission and trade allocation was not guided by the latest evaluation results for more than a quarter every year. Significant variances were noted between the actual commission allocation and the new commission budget adopted in April, which could in turn make it more challenging for the Trading Team to bring them back in line in future months.

38. There were several reasons causing the delays, including that the BVOT system was not set up for voting timely. There was a consensus among OIM staff interviewed by OIOS that the voting could be completed much earlier, say, by mid-February.

(6) OIM should: (i) rationalize the weight allocation to trading-related services for broker performance voting; and (ii) complete the annual broker performance voting in February of each year to guide commission allocation.

OIM accepted recommendation 6.

IV. ACKNOWLEDGEMENT

39. OIOS wishes to express its appreciation to the management and staff of OIM for the assistance and cooperation extended to the auditors during this assignment.

Internal Audit Division Office of Internal Oversight Services

STATUS OF AUDIT RECOMMENDATIONS

Rec. no.	Recommendation	Critical ¹² / Important ¹³	C/ O ¹⁴	Actions needed to close recommendation	Implementation date ¹⁵
1	OIM should: (i) consolidate all procedural documents on brokers/counterparties into one formal procedure; (ii) define in the procedure the proactive actions to be taken, and the related responsibilities in case a broker or counterparty experiences financial distress or is acquired by another entity; and (iii) update, formalize and circulate the standard operating procedures for fixed income and foreign exchange trading.	Important	0	Receipt of documentation showing consolidation of the procedural documents on brokers/counterparties with definition of actions to be taken by responsible parties when a broker/counterparty experiences financial distress or is acquired, and circulation of the formalized SOPs for fixed income and foreign exchange trading.	31 March 2024
2	OIM should strengthen the vetting of new brokers and counterparties and the ongoing monitoring of their financial health and creditworthiness by improving its assessment and monitoring methodology.	Important	0	Receipt of documentation indicating the strengthening of the vetting of new brokers and counterparties and ongoing monitoring of their financial health and creditworthiness.	31 March 2024
3	OIM should commission a study to evaluate the various transaction cost analysis solutions and providers to enhance the measurement of trade execution performance for fixed income and foreign exchange.	Important	0	Receipt of evidence that a comprehensive study has been performed of various TCA solutions and systems for fixed income and foreign exchange trading.	30 September 2024
4	OIM should institute a mechanism to periodically review the reasonableness of the commission rates paid by the Fund to the brokers in various markets.	Important	0	Receipt of evidence that a mechanism has been instituted to periodically review the reasonableness of the commission rates paid by the Fund.	30 September 2024
5	OIM should entrust the Risk Team to: (i) conduct a quarterly review of the weekly reports of trades for which the default commission rate was not applied to assure appropriate justification for the deviations; and (ii) submit a summary of the review results to the Best Execution Committee.	Important	0	Receipt of documentation indicating: (i) quarterly review by the Risk Team of the weekly reports of trades for which the default commission rate is not applied; and (ii) a summary report of the review results submitted to the Best Execution Committee.	31 March 2024
6	OIM should: (i) rationalize the weight allocation to trading-related services for broker performance voting; and (ii) complete the annual broker	Important	0	Receipt of evidence showing more reasonable weight allocation to trading-related services for broker performance voting and completion of	30 June 2024

STATUS OF AUDIT RECOMMENDATIONS

performance voting in February of each year to	annual broker performance voting in February	
guide commission allocation.	of each year.	

¹² Critical recommendations address those risk issues that require immediate management attention. Failure to take action could have a critical or significant adverse impact on the Organization.

¹³ Important recommendations address those risk issues that require timely management attention. Failure to take action could have a high or moderate adverse impact on the Organization.

 ¹⁴ Please note the value C denotes closed recommendations whereas O refers to open recommendations.
 ¹⁵ Date provided by OIM in response to recommendations.

APPENDIX I

Management Response

UNITED NATIONS



INTEROFFICE MEMORANDUM

NATIONS UNIES MEMORANDUM INTERIEUR

To: Mr. Gurpur Kumar Deputy Director Internal Audit Division, OIOS

Mr. Pedro Guazo

FROM:

DATE: July 25, 2023

Reference: OIOS-2023-01167

Pedro Guazo (Jul 25, 2023 22:04 GMT+1)

Jose Antonio Nunez Poble

-and-Mr. José Antonio Nunez Poblete Chief Risk and Compliance Officer Office of Investment Management

Representative of the Secretary-General for the investment of UNJSPF assets

-and-Mr. Toru Shindo Chief Investment Officer Office of Investment Management

-and-

Tam Sinde

Pako Thupayagalo

Mr. Pako Thupayagale, Director of Fixed Income Office of Investment Management

SUBJECT: Draft report on an audit of selection and use of the brokers and counterparties in the Office of Investment Management of the United Nations Joint Staff Pension Fund (Assignment No. AS2023/801/01)

- 1. OIM acknowledges receipt of the draft report on an audit of selection and use of the brokers and counterparties in the Office of Investment Management of the United Nations Joint Staff Pension Fund (Assignment No. AS2023/801/01).
- 2. OIM would like to take this opportunity to thank the Office of Internal Oversight Services and staff for their comprehensive effort including the on-going collaboration during the thorough review and analysis, and the detailed findings, observations and recommendations.
- 3. OIM has attached the completed form provided (Appendix I) including detailed responses and comments to the recommendations related to OIM.

Management Response

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepte d? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	OIM should: (i) consolidate all procedural documents on brokers/counterparties into one formal procedure; (ii) define in the procedure the proactive actions to be taken, and the related responsibilities in case a broker or counterparty experiences financial distress or is acquired by another entity; and (iii) update, formalize and circulate the standard operating procedures for fixed income and foreign exchange trading.	Important	YES	Director of Fixed Income and Chief Risk & Compliance Officer	Q1 2024	
2	OIM should strengthen the vetting of new brokers and counterparties and the ongoing monitoring of their financial health and creditworthiness by improving its assessment and monitoring methodology.	Important	YES	Chief Risk Officer & Compliance Officer	Q1 2024	
3	OIM should commission a study to evaluate the various transaction cost analysis solutions and providers to enhance the measurement of trade execution performance for fixed income and foreign exchange.	Important	YES	CIO and Director of Fixed Income	Q3 2024	
4	OIM should institute a mechanism to periodically review the reasonableness of the commission rates paid by the Fund to the brokers in various markets.	Important	YES	CIO and Chief Risk Officer & Compliance Officer	Q3 2024	
5	OIM should entrust the Risk Team to: (i) conduct a quarterly review of the weekly reports of trades for which the default commission rate was not	Important	YES	Chief Risk Officer & Compliance Officer	Q1 2024	

¹ Critical recommendations address those risk issues that require immediate management attention. Failure to take action could have a critical or significant adverse impact on the Organization.

 $^{^{2}}$ Important recommendations address those risk issues that require timely management attention. Failure to take action could have a high or moderate adverse impact on the Organization.

Management Response

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepte d? (Yes/No)	Title of responsible individual	Implementation date	Client comments
	applied to assure appropriate justification for the deviations; and (ii) submit a summary of the review results to the Best Execution Committee.					
6	OIM should: (i) rationalize the weight allocation to trading-related services for broker performance voting; and (ii) complete the annual broker performance voting in February of each year to guide commission allocation.		YES	CIO and Director of Equities	Q2 2024	