A/78/5/Add.16

United Nations

United Nations Joint Staff Pension Fund

Financial report and audited financial statements

for the year ended 31 December 2022

and

Report of the Board of Auditors

General Assembly
Official Records
Seventy-eighth Session
Supplement No. 5P

General Assembly
Official Records
Seventy-eighth Session
Supplement No. 5P

A/78/5/Add.16

United Nations Joint Staff Pension Fund

Financial report and audited financial statements

for the year ended 31 December 2022

and

Report of the Board of Auditors

United Nations • New York, 2023

Note

Symbols of United Nations documents are composed of letters combined with figures. Mention of such a symbol indicates a reference to a United Nations document.

ISSN 0257-0815

[26 July 2023]

Contents

Letters of transmittal

Letter dated 31 May 2023 from the Chief Executive of Pension Administration of the United Nations Joint Staff Pension Fund and the Representative of the Secretary-General for the investment of the assets of the United Nations Joint Staff Pension Fund addressed to the Chair of the Board of Auditors

In accordance with financial rule G.5 of the United Nations Joint Staff Pension Fund, we have the honour to transmit the financial statements of the Fund for the year ended 31 December 2022, which we hereby approve. The Chief Executive of Pension Administration and the Representative of the Secretary-General for the investment of the assets of the Fund approved the financial statements for their respective areas of responsibility. The financial statements have been completed and certified by the Chief Financial Officer of the Fund as correct in all material respects.

(*Signed*) Rosemarie **McClean**
Chief Executive of Pension Administration
United Nations Joint Staff Pension Fund

(*Signed*) Pedro **Guazo**
Representative of the Secretary-General for the investment
of the assets of the United Nations Joint Staff Pension Fund

Letter dated 26 July 2023 from the Chair of the Board of Auditors addressed to the President of the General Assembly

I have the honour to transmit to you the report of the Board of Auditors, together with the financial report and the audited financial statements of the United Nations Joint Staff Pension Fund for the year ended 31 December 2022.

(*Signed*) **Hou** Kai
Auditor General of the People’s Republic of China
Chair of the Board of Auditors

Chapter I

Report of the Board of Auditors on the financial statements: audit opinion

Opinion

We have audited the financial statements of the United Nations Joint Staff Pension Fund, which comprise the statement of net assets available for benefits (statement I) as at 31 December 2022, the statement of changes in net assets available for benefits (statement II), the cash flow statement (statement III), and the statement of comparison of budget and actual amounts on a comparable basis in relation to administrative expenses for the year ended 31 December 2022 (statement IV), as well as the notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly, in all material respects, the net assets available for benefits of the United Nations Joint Staff Pension Fund as at 31 December 2022 and the changes in net assets available for benefits and its cash flows for the year then ended, in accordance with the International Public Sector Accounting Standards (IPSAS) and International Accounting Standard 26.

Basis for opinion

We conducted our audit in accordance with the International Standards on Auditing and the International Standards of Supreme Audit Institutions. Our responsibilities under those standards are described in the section below entitled "Auditor's responsibilities for the audit of the financial statements". We are independent of the Fund in accordance with the ethical requirements relevant to our audit of the financial statements, and we have fulfilled our other ethical responsibilities in accordance with those requirements. We believe that the audit evidence that we have obtained is sufficient and appropriate to provide a basis for our opinion.

Information other than the financial statements and the auditor's report thereon

The Chief Executive of Pension Administration and the Representative of the Secretary-General for the investment of the assets of the Fund, within their respective authority under the Regulations of the Fund, are responsible for the other information, which comprises the financial report for the year ended 31 December 2022, contained in chapter IV below, but does not include the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information, and we do not express any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, on the basis of the work that we have performed, we conclude that there is a material misstatement in the other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of management and those charged with governance for the financial statements

The Chief Executive of Pension Administration and the Representative of the Secretary-General, within their respective authority under the Regulations of the Fund, are responsible for the preparation and fair presentation of the financial statements in accordance with International Accounting Standard 26 and IPSAS and for such internal control as the management determines to be necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the management is responsible for assessing the ability of the Fund to continue as a going concern, disclosing, as applicable, matters related to the going concern and using the going-concern basis of accounting unless the management intends either to liquidate the Fund or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the financial reporting process of the Fund.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance as to whether the financial statements as a whole are free from material misstatements, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the International Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the International Standards on Auditing, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

(a) Identify and assess the risks of material misstatement in the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than the risk of not detecting one resulting from error, as fraud may involve collusion, forgery, intentional omission, misrepresentation or the overriding of internal control;

(b) Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control of the Fund;

(c) Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management;

(d) Draw conclusions as to the appropriateness of the management's use of the going-concern basis of accounting and, on the basis of the audit evidence obtained, whether a material uncertainty exists in relation to events or conditions that may cast significant doubt on the ability of the Fund to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Fund to cease to continue as a going concern;

(e) Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on other legal and regulatory requirements

In our opinion, the transactions of the Fund that have come to our notice or that we have tested as part of our audit have, in all significant respects, been in accordance with the Financial Regulations and Rules of the United Nations and the financial rules of the Fund and their legislative authority.

In accordance with article VII of the Financial Regulations and Rules of the United Nations, we have also issued a long-form report on our audit of the Fund.

(*Signed*) **Hou** Kai
Auditor General of the People's Republic of China
Chair of the Board of Auditors

(*Signed*) Jorge **Bermúdez**
Comptroller General of the Republic of Chile
(Lead Auditor)

(*Signed*) Pierre **Moscovici**
First President of the Court of Auditors of France

26 July 2023

Chapter II
Long-form report of the Board of Auditors

Summary

The United Nations Joint Staff Pension Fund 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 organizations admitted to the membership of the Fund. It is administered by the United Nations Joint Staff Pension Board.

The Board of Auditors audited the financial statements of the Fund and reviewed its operations for the year ended 31 December 2022 in accordance with General Assembly resolutions 74 (I) of 1946 and 680 (VII) of 1952 and in conformity with article VII of the Financial Regulations and Rules of the United Nations and the International Standards on Auditing. The interim audit was carried out from 3 October to 4 November 2022, and the final audit was conducted from 1 May to 1 June 2023, both at the Fund's headquarters in New York.

Scope of the report

The present report covers matters that, in the opinion of the Board, should be brought to the attention of the General Assembly and have been discussed with the management of the Fund, whose views have been appropriately reflected.

The audit was conducted primarily to enable the Board to form an opinion as to whether the financial statements present fairly the net assets available for benefits of the United Nations Joint Staff Pension Fund as at 31 December 2022 and the changes in net assets available for benefits and its cash flows for the year then ended, in accordance with the International Public Sector Accounting Standards (IPSAS) and International Accounting Standard 26. The audit included a general review of the financial systems and internal controls and a test examination of the accounting records and other supporting evidence to the extent that the Board considered necessary to form an opinion on the financial statements.

The Board also reviewed the Fund's operations under regulation 7.5 of the Financial Regulations and Rules of the United Nations, which allows the Board to make observations on the efficiency of the financial procedures, the accounting system, the internal financial controls and, in general, the administration and management of operations.

The Board also reviewed a detailed follow-up of actions taken in response to recommendations made in previous years.

Audit opinion

In the Board's opinion, the financial statements present fairly, in all material respects, the net assets available for benefits of the United Nations Joint Staff Pension Fund as at 31 December 2022 and the changes in net assets available for benefits and its cash flows for the year then ended, in accordance with IPSAS and International Accounting Standard 26.

Overall conclusion

The Fund has prepared its financial statements in accordance with International Accounting Standard 26 and following the provisions of IPSAS since 2012. The Fund has incorporated the guidance from International Accounting Standard 26 into its financial policies. Its financial presentation is based on that guidance, and additional information is presented where requested by IPSAS.

The Board did not identify significant errors, omissions or misstatements from the review of the financial records of the Fund for the year ended 31 December 2022. However, the Board identified scope for improvement in the implementation of environmental, social and governance metrics, the gender balance strategy and the overpayments write-off criteria.

As at December 2022, the total assets of the Fund amounted to $78.61 billion, and the total liabilities amounted $0.69 billion. Net assets available for benefits totalled $77.92 billion.

The Fund's total value of investments as at 31 December 2022 amounted to $77.44 billion. During 2022, the investments experienced significant underperformance owing to macroeconomic factors and industry-specific challenges, which led to a decrease of $13.54 billion in the net assets available for benefits.

Key findings

The Board's key findings are as follows:

Office of Investment Management

Need to strengthen climate action-related pillars

The Board reviewed the implementation of the recommendations of the Task Force on Climate-related Financial Disclosures, and it was observed that the sustainable investment approach was not addressed by the Internal Investment Committee. In addition, the sustainable investment team designed a workplan to address the sustainable investing strategy, but without detailing the specific activities, staff responsible, goals, benchmarks and deadlines for compliance with the broad topics established in its strategic plan for 2022–2023 and the recommendations and targets to which it committed. The Office of Investment Management provided the list of engagements for which commitments had been made for closure by 2025 which did not have a timeline that could clarify how the closure of those engagements would be achieved and what the strategy in this matter would be.

Deficiency in the integration of environmental, social and governance factors

The Board reviewed a sample of investment purchases, and it was observed that there were transactions without the investment rationale analysis on environmental, social and governance matters completed by the Office of Investment Management. For the sample of fixed-income transactions, it was noted that the Office did not use the environmental, social and governance dashboard, and that there was no investment recommendation made by the Office and no investment rationale analysis on environmental, social and governance matters.

In addition, the Board reviewed the Office's environmental, social and governance reports for the first and second quarters of 2022 for equities issued, which showed that there were securities with reports indicating that they had the highest carbon emissions and low Morgan Stanley Capital International environmental, social and governance ratings, and that some companies presented high-impact controversies, with red or orange flags in the first quarter.

Main recommendations

On the basis of the audit findings, the Board recommends that the Office of Investment Management:

Need to strengthen climate action-related pillars

(a) **Strengthen the role of the Internal Investment Committee to oversee the Office's approach to sustainable investment;**

(b) **Develop and implement a workplan to address and close the 70 engagements committed to, and to include the metrics and targets to meet the objective of reduced financed emissions in other asset classes by 2025, with the purpose of complying with the Net-Zero Asset Owner Alliance timetable committed to;**

Deficiency in the integration of environmental, social and governance factors

(c) **Revise and adjust the current sustainable investing implementation guidelines to ensure that the activities to be considered are aligned with the nature of the investment and the current operation for each asset class;**

(d) **Strengthen and evaluate its current monitoring mechanism to ensure that the environmental, social and governance metrics are being effectively integrated into the investment decision-making process, in order to comply with the investment policy statement and environmental, social and governance guidelines.**

Follow-up of previous recommendations

The Board noted 35 outstanding recommendations up to the period ended 31 December 2021, of which 29 (83 per cent) had been implemented and 6 (17 per cent) were under implementation.

Key facts	
25	Number of member organizations
143,612	Participants in the Fund
83,988	Periodic benefits
$78.61 billion	Total assets
$77.92 billion	Net assets available for benefits
($13.46 billion)	Investment loss
$3.13 billion	Pension contributions and other income (other than investments)
($3.21 billion)	Benefit payments and expenses

A. Mandate, scope and methodology

1. The United Nations Joint Staff Pension Fund 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 organizations admitted to the membership of the Fund. It is administered by the United Nations Joint Staff Pension Board and currently has 25 participating organizations, including the United Nations. The Fund is a multiple-employer defined benefit plan.

2. The Board has audited the financial statements of the Fund and has reviewed its operations for the year ended 31 December 2022 in accordance with General Assembly resolutions 74 (I) of 1946 and 680 (VII) of 1952. The audit was conducted in conformity with article VII of the Financial Regulations and Rules of the United Nations and the International Standards on Auditing. Those standards require that the Board comply with ethical requirements and plan and perform the audit to obtain reasonable assurance as to whether the financial statements are free from material misstatement.

3. The audit was conducted primarily to enable the Board to form an opinion as to whether the financial statements presented fairly the net assets available for benefits of the United Nations Joint Staff Pension Fund as at 31 December 2022 and the changes in net assets available for benefits and its cash flows for the year then ended, in accordance with the International Public Sector Accounting Standards (IPSAS) and International Accounting Standard 26. The audit was conducted in conformity with the Financial Regulations and Rules of the United Nations as well as the International Standards on Auditing and the International Standards of Supreme Audit Institutions. This included an assessment of whether the expenses recorded in the financial statements had been incurred for the purposes approved by the governing bodies and whether income and expenses had been properly classified and recorded.

4. The audit included a general review of the financial systems and internal controls and a test examination of the accounting records and other supporting evidence to the extent that the Board considered necessary to form an opinion on the financial statements

5. The Board also reviewed Fund operations under regulation 7.5 of the Financial Regulations and Rules of the United Nations. This requires that the Board make observations with respect to the efficiency of the financial procedures, the accounting system and the internal financial controls and, in general, the administration and management of Fund operations.

6. The present report covers matters that, in the opinion of the Board, should be brought to the attention of the General Assembly. The Board's observations and conclusions were discussed with the management of the Fund, whose views have been appropriately reflected in the report.

B. Findings and recommendations

1. Follow-up of previous recommendations

7. The Board verified the status of implementation of previous years' recommendations for the period ended 31 December 2021. Of the 35 outstanding recommendations, the Fund had implemented 29 (83 per cent), and 6 (17 per cent) were under implementation. A detailed status and progress of all previous outstanding recommendations are given in the annex to chapter II and in table II.1.

Table II.1
Status of implementation of recommendations

Report and audit year	*Number of recommendations*	*Recommendations pending as at 31 December 2021*	*Implemented*	*Under implementation*	*Not implemented*	*Overtaken by events*	*Recommendations pending as at 31 December 2022*
A/73/5/Add.16, chap. II (2017)	41	1	1	–	–	–	–
A/74/5/Add.16, chap. II (2018)	–	–	–	–	–	–	–
A/75/5/Add.16, chap. II (2019)	44	4	4	–	–	–	–
A/76/5/Add.16, chap. II (2020)	28	9	7	2	–	–	2
A/77/5/Add.16, chap. II (2021)	21	21	17	4	–	–	4
Total	**134**	**35**	**29**	**6**	**–**	**–**	**6**

8. The Board considers that an 83 per cent rate of implementation indicates a strong commitment of the Fund to managing long-standing recommendations. The Board acknowledges the management's efforts and encourages the Fund to go further with the implementation process, in particular for those recommendations related to budgetary matters included in the report for 2021 (A/77/5/Add.16, chap. II), which will help the Fund by presenting improved budget proposals.

2. Financial overview

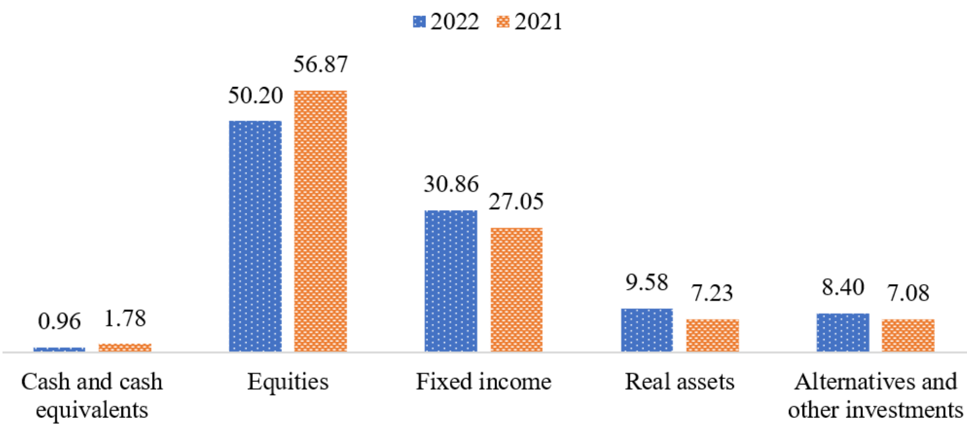
9. As at December 2022, the total assets of the Fund amounted to $78.61 billion (2021: $91.77 billion) and the total liabilities amounted to $0.69 billion (2021: $0.31 billion). The increase in liabilities is due to purchases traded at year end that were paid in January 2023. Net assets available for benefits totalled $77.92 billion (2021: $91.46 billion), decreasing by $13.54 billion (14.81 per cent) compared with the increase of $9.95 billion in 2021.

10. The Fund assets consist mainly of investments, representing 98.51 per cent of the total assets, whose fair value as at 31 December of 2022 was $77.44 billion, and cash and cash equivalents totalled $0.75 billion (2021: $1.63 billion). The asset class allocation was $39.25 billion (50.20 per cent) in equities, $24.13 billion (30.86 per cent) in fixed income, $7.49 billion (9.58 per cent) in real assets and $6.57 billion (8.40 per cent) in alternative investments. The percentage share of each component of investment, compared with 2021, is shown in figure II.I.

Figure II.I

Share of components in the fair value of investments and cash and cash equivalents in 2022, compared with 2021

(Percentage)

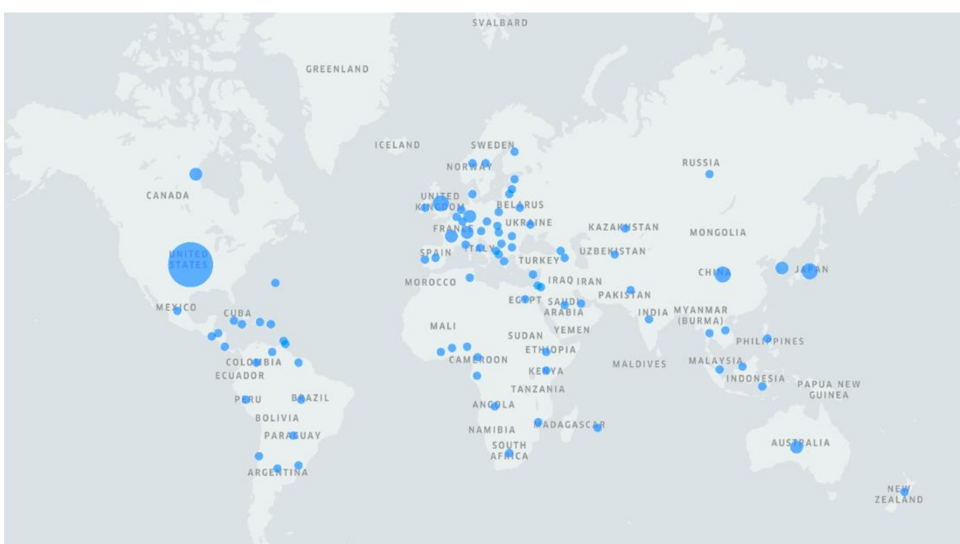


Source: United Nations Joint Staff Pension Fund financial statements.

11. As at 31 December 2022, investments were distributed in more than 90 countries. The largest concentration of investments was allocated in the United States of America, corresponding to 70.92 per cent of total investments, followed by Japan with 3.82 per cent, China with 3.12 per cent and the United Kingdom of Great Britain and Northern Ireland with 3.11 per cent. The geographical distribution of the portfolio (by counterparty's place of primary listing) is illustrated in figure II.II. Consequently, most investments were allotted to North America (72.76 per cent), Europe (11.47 per cent) and Asia and the Pacific emerging markets (6.93 per cent).

Figure II.II

Geographical distribution of investments as at 31 December 2022, by counterparty's place of primary listing



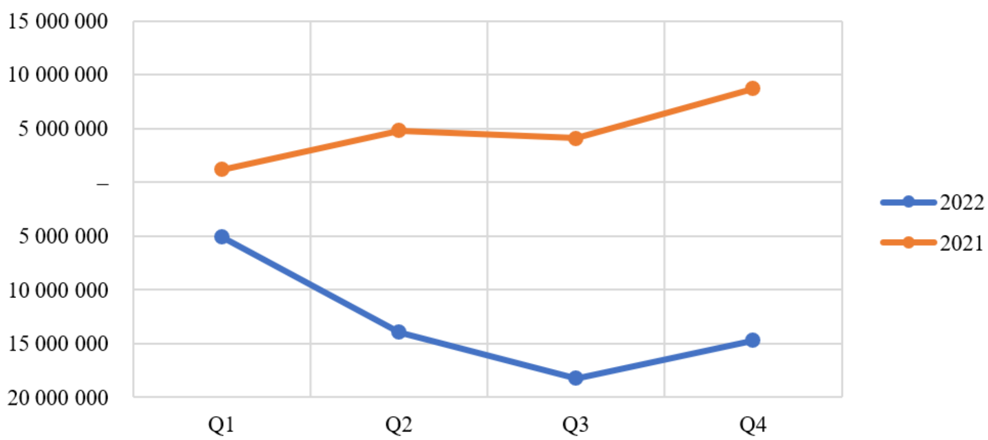
Source: Based on data extracted from the investment portfolio.

12. During 2022, the investments experienced significant underperformance, due primarily to a combination of macroeconomic factors and company-specific challenges. The global economy faced a series of uncertainties, including geopolitical tensions, trade disputes and concerns over rising inflation, which had an impact on the financial markets.

13. As a consequence, the value of total investments of the Fund as at 31 December 2022 dropped by $12.42 billion, a decrease of 13.82 per cent in comparison with the prior year, owing the depreciation in fair value ($14.74 billion), offset by interest income ($0.59 billion) and income from unitized real estate funds ($0.1 billion). The observed outcome can be attributed primarily to a decline in the fair value of equities, with a notable concentration in six countries, prominently led by the United States, due to the effects of the aforementioned macroeconomic factors. Quarterly accumulated deviations of the fair value of investments are illustrated in figure II.III.

Figure II.III
Quarterly accumulated deviations of the fair value of investments in 2022, compared with 2021

(Thousands of United States dollars)



Source: United Nations Joint Staff Pension Fund financial statements.

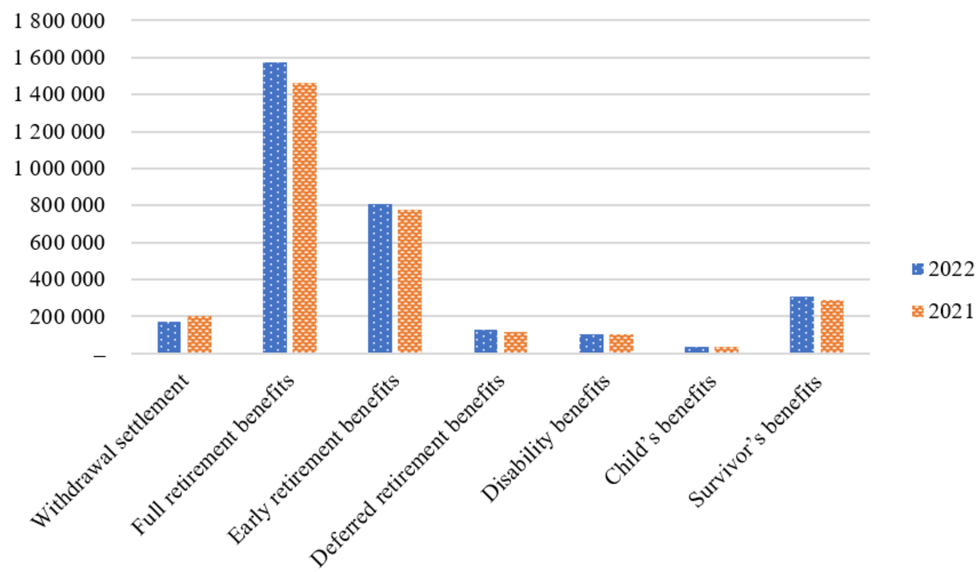
14. Total investment loss of the Fund was $13.45 billion (investment income in 2021: $10.05 billion), including depreciation in the fair value of investments of $14.74 billion (appreciation in the fair value in 2021: $8.71 billion), which includes foreign exchange income of $1.08 billion (2021: $0.97 billion). Historically, appreciation/depreciation in the fair value of the Fund's investments has been the driving force for investment income. The other components of income loss have in large part remained constant.

15. Other components of the changes in net assets available for benefits were income from services provided to the United Nations ($8.30 million), administrative expenses ($83.04 million) and other expenses ($1.67 million).

Participants and benefits

16. As at 31 December 2022, the Fund had 143,612 participants (2021: 137,261 participants) and 83,988 beneficiaries (2021: 82,312 beneficiaries). Pension contributions amounted to $3.12 billion (2021: $2.97 billion), and the annual payment of periodic benefits made by the Fund amounted to $3.13 billion (2021: $2.98 billion) and were issued in 17 currencies in some 190 countries. The benefits paid by type of benefit in 2022 and 2021 are shown in figure II.IV.

Figure II.IV
Benefits paid in 2022 by type of benefit, compared with 2021
(Thousands of United States dollars)



Source: United Nations Joint Staff Pension Fund financial statements.

Financial statements

17. Various suggestions made by the Board for the enhancement of disclosures of the financial statements were reflected in the final version of the statements.

3. Office of Investment Management

Need to strengthen climate action-related pillars

18. The efforts of the United Nations to combat global climate change are diverse and different in nature, strategies and approaches. They involve multiple United Nations entities and competing priorities in terms of budget, time and expertise.

19. As part of these initiatives, at the 2019 Climate Action Summit, the Secretary-General launched the Net-Zero Asset Owner Alliance, an international group of institutional investors committed to transitioning their investment portfolios to net-zero greenhouse gas emissions by 2050. The Office of Investment Management joined the Alliance in 2020.

20. Since 2019, the Office has integrated environmental, social and governance elements into its investment policy statement, to underline the Fund's commitment to the integration of environmental, social and governance factors into its activities.

21. In addition, in 2020, the Office committed to disclosing its internal processes, commitments and actions for evaluating and acting on climate change by implementing the recommendations made by the Task Force on Climate-related Financial Disclosures, an advisory body set up by the Group of 20 to address concerns about the insufficient disclosure of climate-related risks and opportunities for businesses.

22. The Task Force set up 11 recommendations to help businesses to disclose climate-related financial information by disclosing clear, comparable and consistent information about the risks and opportunities presented by climate change, in line with the organizations' strategies and risk management processes, which are

structured around four thematic pillars: governance, strategy, risk management, and metrics and targets. The adoption of these recommendations will also help organizations to better demonstrate responsibility and foresight in their consideration of climate issues, which will lead to smarter and more efficient allocation of capital, and help to smooth the transition to a more sustainable, low-carbon economy. The Office issued its first report on the Task Force in 2021.

23. From the review of the implementation of the Task Force recommendations, grouped by pillar, the Board observed the following:

(a) Concerning the governance pillar, the climate-related decision-making of the Office followed a well-structured channel of oversight and accountability that included different governing authorities and culminated with the Secretary-General, as described in the Office's report on the Task Force in 2021. In this regard, the following issues were detected:

(i) The sustainable investing team, responsible for the day-to-day sustainable activities of the Office and for coordinating those activities with various stakeholders involved in the sustainable investing process, designed a workplan to address the sustainable investing strategy. However, the workplan did not detail the specific activities, staff responsible, goals, benchmarks and deadlines for compliance with the broad topics established in the sustainable investing team's strategic plan for 2022–2023 and the recommendations and targets committed to by the Task Force;

(ii) The environmental, social and governance rules and objectives were not fully complied with for each asset class, in accordance with the Office's environmental, social and governance guidelines established in 2020. It should be mentioned that the Office's risk and compliance team was in charge of ensuring and monitoring whether internal environmental, social and governance rules and objectives were respected, including climate-related topics;

(iii) The role of the Internal Investment Committee was to oversee and recommend the Office's approach to sustainable investment and ensure that responsible investment principles were incorporated into investment activities. However, as verified in its monthly minutes from January to August 2022, the sustainable investing approach was not addressed by the Committee;

(b) As for the risk management pillar, the Office has incorporated in-house methodologies and third parties to identify risks and has used engagements in transitioning companies to manage climate risks and take advantage of climate opportunities. The Office provided a list of 70 engagements for which commitments had been made for closure by 2025, detailing the progress made as at 31 August 2022, but it did not present a timeline that could clarify how it would achieve closure of those engagements and what the strategy would be. It should be noted that up to August 2022 only 13 engagements had been completed, which began to be established in 2019 and 2020. Likewise, it was observed that the Office did not have established goals each year to meet the number of engagements committed to by 2025, and had not prioritized closing the engagements with companies that had had deficient environmental, social and governance ratings or had been involved in high-impact controversies. Moreover, for cases in which closing would not be feasible during that period, the Office did not define an alternative plan;

(c) Regarding the metrics and targets pillar, the Office used emissions metrics and targets to meet the objective of reducing financed emissions[1] in its equity and

[1] Financed emissions are greenhouse gas emissions associated with the financing and investing activities made by an organization.

corporate bonds portfolios by 29 per cent in 2021 and by 40 per cent by 2025, compared with 2019 levels. Nevertheless, in the third quarter of 2022, the measurement included only the equities portfolio, even though it should also have included the corporate bond portfolio. It is worth mentioning that the exclusion of the corporate bond portfolio is not aligned with the emissions metrics and targets committed to by the Task Force on Climate-related Financial Disclosures and the Net-Zero Asset Owner Alliance.

24. In connection with the metrics and targets pillar, as with the Net-Zero Asset Owner Alliance, the Office was planning to extend the scenario analysis on reducing the greenhouse gas footprint by 2025 over the major asset classes. In this context, it was noted that up to August 2022 there was no workplan established to include other asset classes in the short term.

25. The Board acknowledges the progress on sustainability matters made by the Fund, which has officially included a sustainable approach in its investment policy and has voluntarily joined alliances to make a contribution to environmental, social and governance, resulting in the Fund being ranked first on the leaders list in 2021–2022 Responsible Asset Allocator Initiative Index and Leaders List Report, recognizing the Fund’s leadership in responsible investing.

26. However, the Board is of the view that the governance pillar should be strengthened to effectively manage climate-related risks and opportunities in order to be aligned with the Office’s sustainable investing approach.

27. Regarding the risk management pillar, the Board is concerned that the lack of a clear strategy, workplan and goals, as well as the complexity, time and resources required to close engagements, may lead to difficulties in meeting the 70 engagements committed to by 2025. However, the Board encourages the Office to continue its efforts to engage with companies to manage climate risks.

28. In addition, with respect to the metrics and targets pillar, the Board considers that the Office should move forward and work on extending the metrics and targets to the major asset classes and disclose the current asset class emissions measured in 2022 in order to assess climate-related risks and opportunities in line with the investment strategy and risk management processes.

29. **The Board recommends that the Office of Investment Management strengthen the role of the Internal Investment Committee to oversee the Office’s approach to sustainable investment.**

30. **The Board recommends that the Office of Investment Management sustainable investing team complement the current workplan, including activities, staff responsible, goals, benchmarks and deadlines, to comply with the broad topics established in its strategic plan for 2022–2023 and the recommendations and targets committed to by the Task Force on Climate-related Financial Disclosures.**

31. **The Board recommends that the Office of Investment Management develop and implement a workplan to address and close the 70 engagements committed to, and to include the metrics and targets to meet the objective of reduced financed emissions in other asset classes by 2025, with the purpose of complying with the Net-Zero Asset Owner Alliance timetable committed to.**

32. The Office of Investment Management accepted the recommendations.

Deficiency in the integration of environmental, social and governance factors

33. Under the Sustainable Development Goals, in particular Goal 17 on partnerships for the Goals, and the need for the global community to engage investors in global

issues, the Office's sustainable investing approach seeks to promote sustainable business practices and stewardship that advocates the improvement of the environment, fair labour practices, non-discrimination and the protection of human rights, and references such internationally recognized sustainability-related initiatives as principles for responsible investment and the United Nations Global Compact.

34. In 2019, the Office established the sustainable investing implementation guidelines for each asset-class portfolio, since each portfolio has a unique nature of investment processes, opportunities and risks posed by environmental, social and governance factors.

35. The sustainable investing approach approved in September 2022 in the investment policy statement is aligned with its fiduciary duty and responsibility and includes material environmental, social and governance considerations that are currently in the process of being integrated throughout the investment decision-making process.

36. In addition, through its engagement and proxy voting partners, the Office regularly engages with the management of invested companies on issues related to environmental, social and governance and the resolution thereof. By exercising proxy voting power and shareholders' rights as well as by collaborating with other stakeholders of the invested companies, the Office seeks to influence the companies to improve their environmental, social and governance practices.

37. The Board reviewed a sample of 19 of the 278 new investment instruments on the portfolio, which amounted to $471,928,029.65 as at 31 August 2022, to verify that the environmental, social and governance factors had been integrated throughout the investment decision-making process under the sustainable investing implementation guidelines established by the Office for each asset class portfolio, as follows:

(a) In a sample of eight global public equities transactions, it was observed that:

(i) None of the transactions had the investment rationale analysis on environmental, social and governance matters completed by the Office;

(ii) For six transactions, the environmental, social and governance analysis by Bloomberg differed by more than three months from the analysis to the date on which the transaction was finally traded;

(iii) Even though the environmental, social and governance metric was one of the factors to consider at the moment of investing, the Board noted that:

a. Five transactions had a medium or low rating on the Morgan Stanley Capital International environmental, social and governance rating analysis;

b. There were five companies in which the Office had invested that were involved in disputes such as anti-competitive practices, impacts on local communities, environment, customers, labour rights and human rights impacts, labour management relations and supply chain management;

c. The Office had invested in two companies that were on the watch list according to the Morgan Stanley Capital International United Nations Global Compact index;

(iv) For four transactions, no priority proxy voting had been carried out, or no shares were held at the time of voting;

(v) Four transactions had no sustainable engagement made up to date;

(vi) For the small caps equities transaction, managed by external managers, the Office had evaluated whether the external manager had an environmental, social and governance policy, but did not carry out the assessment on the company in which the external manager had invested;

(b) In a sample of eight fixed-income transactions, it was noted that:

(i) The Office did not use the environmental, social and governance dashboard (which includes environmental, social and governance metrics from different environmental, social and governance data providers at the global-level corporate issuer), even though the guideline states that such a dashboard would help the fixed income investment analysis;

(ii) No transactions had an investment recommendation made by the Office or an investment rationale analysis on environmental, social and governance matters;

(iii) The Morgan Stanley Capital International environmental, social and governance rating analysis and the Sustainable Accounting Standards Board materiality matrix were not used, as established in the guidelines as part of the environmental, social and governance themes/topics to be considered;

(iv) Regarding the issuer analysis, there was no evidence of the review having been carried out as established in the guideline;

(v) Regarding sustainability engagement, two transactions did not have an engagement in force;

(c) In a sample of three alternative and other investments, it was observed that:

(i) Although the Office should make a presentation for approval for co-investments, for two co-investments, such presentations did not include an environmental, social and governance analysis;

(ii) For the other investment, the Sustainable Accounting Standards Board materiality matrix had not been used in the environmental, social and governance analysis;

(iii) Up to 31 August 2022, no engagements had been made for alternative and other investments.

38. In addition, the Board reviewed the Office's environmental, social and governance reports for equities issued in the first and second quarters of 2022, which showed the situation of the securities that were in the portfolio up to that date, to evaluate the investment decisions in that regard. The following details were identified in the reports:

(a) At least 29 securities had the highest carbon emissions as well as low Morgan Stanley Capital International environmental, social and governance ratings in the first and second quarters;

(b) At least 13 companies presented high-impact controversies, such as customer, governance and labour rights issues, environmental impacts and human rights violations, and had a red or orange flag in the first quarter.

39. The Board deems that, even if the decision to invest does not depend only on sustainability and reputational aspects, they represent an additional criterion to consider in the assessment of whether or not to invest, according to the Fund's sustainable investing strategy.

40. In addition, the Board views with concern the fact that the environmental, social and governance metrics and reputational risks may not be considered in the investment decision-making process, even though they can help to mitigate many long-term risks and can have a positive material financial impact on the Fund's investments.

41. The Board is of the view that issues observed and the lack of monitoring of the environmental, social and governance factors may lead to difficulties in complying with the sustainable investing strategy and also would not be aligned with the investment policy statement and environmental, social and governance guidelines.

42. **The Board recommends that the Office of Investment Management revise and adjust the current sustainable investing implementation guidelines to ensure that the activities are aligned with the nature of the investment and the current operation for each asset class.**

43. **The Board recommends that the Office of Investment Management strengthen and evaluate its current monitoring mechanism to ensure that the environmental, social and governance metrics are effectively integrated into the investment decision-making process, in order to comply with the investment policy statement and environmental, social and governance guidelines.**

44. The Office of Investment Management accepted the recommendations.

Exchange-traded funds exempt from environmental, social and governance and rating restrictions

45. The Office's investment policy statement, updated and approved in September 2022, establishes in paragraph 6 on governance, staff obligations and objectives that the Office strives to ensure that all of its activities integrate the ideals of sustainable investing, including taking into account environmental, social and governance metrics, while remaining entirely consistent with its fiduciary responsibility to meet the long-term investment objective.

46. In accordance with paragraph 68 of the Office's approach to sustainable investing in the investment policy statement, the Fund acknowledges its responsibility to society as part of an international organization committed to social progress by being a founding signatory to the principles for responsible investment and its association with the United Nations Global Compact and the United Nations Environment Programme finance initiative.

47. In this context, the Office may invest in all types of securities and assets consistent with its eligible investment universe, including, among others, exchange-traded funds.[2] However, the Fund restricts investments in the tobacco industry and in the securities of companies producing controversial weapons, including weapons of mass destruction, as well as fossil fuel companies.

48. From the analysis of the investment policy statement, the Board noticed that the exchange-traded funds and other index products were exempt from environmental, social and governance analysis and rating restrictions.

49. The Board therefore reviewed the nine exchange-traded funds held in the global public equities investment portfolio, which represented a total amount of $1,089,914,719 as at 31 August 2022. Seven of the funds were managed by the Office's global emerging markets team and two by external managers. The following shortcomings were identified:

(a) According to the fact sheet provided by the administrator BlackRock, none of the exchange-traded funds held in the portfolio sought to follow a sustainable, impact or environmental, social and governance investment strategy;

[2] Exchange-traded funds are a type of pooled investment security that operates in a similar way to a mutual fund. Usually, exchange-traded funds track a specific index, sector, commodity or other asset; they can be purchased or sold on a stock exchange.

(b) Analysing the sustainability characteristics of the exchange-traded funds, seven had issuers that had been identified by Morgan Stanley Capital International environmental, social and governance research as follows:

(i) Four as producing tobacco products;

(ii) One as involved in controversial weapons;

(iii) Two as producing firearms and small arms ammunitions for civilian markets;

(iv) Six as earning over 5 per cent of total revenue from thermal coal mining;

(v) Four as failing to comply with the United Nations Global Compact principles;

(c) All exchange-traded funds were identified by Morgan Stanley Capital International as associated with activities with an implied temperature rise over 2.5°C, which was not aligned with the temperature goal of the Paris Agreement;

(d) At least three exchange-traded funds from three different countries were identified in the Office's environmental, social and governance report for the first quarter of 2022 as being associated with the highest carbon-emitting securities in the portfolio;

(e) The prevailing criterion to include these instruments in the portfolio was the exposure to certain markets, liquidity and cost. It should be noted that the exchange-traded funds recorded an underperformance in 2022 and that the environmental, social and governance analysis had not been considered.

50. The Board is concerned that exchange-traded funds are excluded from the analysis of environmental, social and governance and rating restrictions, taking into account that the sustainable strategy established in the Office's investment policy statement seeks to integrate environmental, social and governance analysis into all asset classes. In turn, when the investment policy statement declares exchange-traded funds as permitted instruments for investments that belong to the public equities asset class, even when there is no useful environmental, social and governance index in the marketplace fitting such instruments, the Office should at least analyse and ponder their sustainability characteristics and decide whether it is appropriate to keep them in the investments portfolio or to replace them with other types of instruments, if feasible.

51. The Board is of the view that integrating the principles of sustainable investing, which includes environmental, social and governance metrics and potential reputational risks, into the investment decision allows the Office to align with various United Nations initiatives, such as the Paris Agreement, the principles for responsible investment, the United Nations Environment Programme finance initiative and the United Nations Global Compact.

52. **The Board recommends that the Office of Investment Management revise the current investment policy statement to ensure that all instruments by each asset class are not exempt from the analysis of environmental, social and governance and rating restrictions, including exchange-traded funds and any other index products.**

53. **The Board recommends that the Office of Investment Management establish and implement a procedure to integrate the analysis of the environmental, social and governance metrics, rating restrictions and reputational risk issues through the exchange-traded funds investment process, in order to be aligned with the sustainable strategy for all asset classes.**

54. The Office of Investment Management did not accept the recommendations and explained that the exception for exchange-traded funds in the investment policy statement was for the exclusion of certain asset types from the investment universe. The reason was that exchange-traded funds grant access to markets and that these were designed for external asset managers to replicate indices mechanically, making it impossible to follow the Office's environmental, social and governance policies. As such, the Office indicated that the exception of environmental, social and governance exclusion is considered in paragraph 50 of the investment policy statement, allowing the Office to manage the portfolio efficiently and effectively through further diversification, which was one of the key elements of safety as part of the four investment criteria mandated by the General Assembly.

55. The Board holds that, since exchange-traded funds are an eligible type of investment in the investment policy statement and that sustainable investing is an objective and a commitment of the Office, the environmental, social and governance analysis and rating restrictions should not be excluded in the decision-making process, but rather should be pondered. Therefore, the Board maintains the recommendations.

4. Pension Administration

Lack of guidance on overpayments write-offs criteria

56. The Fund's accounts receivable write-off policy and procedures, revised in July 2020, states that overpayments may be deemed unrecoverable and may be written off as uncollectible receivables two years after discovery by the Fund. For write-off purposes, the Accounts Section should prepare a write-off recommendation, including background and basic facts regarding the case, evidence of efforts made to recover the funds and a summary of findings and reasons to consider the case unrecoverable. Minor overpayments of $50 or less may be written off without collection efforts if it has been over two years after discovery by the Fund.

57. Likewise, according to paragraph G.7 in section G of annex II to the Financial Rules of the Fund, the Chief Executive of Pension Administration or the Representative of the Secretary-General may authorize the impairment of assets, including but not limited to receivables.

58. In addition, the Fund's write-off of receivables has been subject to consultation by the Advisory Committee on Administrative and Budgetary Questions, as shown in its fifteenth report on the proposed programme budget for 2022 (A/76/7/Add.14).

59. The Board extracted from the Integrated Pension Administration System the overpayments ageing report as at 31 August 2022, which contained 2,109 overpayments from 2003 to 2022 related to the death of the beneficiary. The breakdown is shown in table II.2.

Table II.2
Overpayment breakdown as at 31 August 2022
(United States dollars)

Period	*Number of cases*	*Overpayment*	*Recovery*	*Balance*	*Recovery rate (percentage)*
2003–2008	35	116 873	0	116 873	0
2009–2014	276	1 084 910	3 809	1 081 101	0
2015–2020	1 206	6 601 210	1 611 447	4 989 763	24
2021	294	1 736 712	379 684	1 357 028	22
2022	298	1 689 497	271 096	1 418 401	16
Total	**2 109**	**11 229 202**	**2 266 036**	**8 963 166**	**20**

Source: Based on the overpayments ageing report as at 31 August 2022.

60. The Board noted that the Fund had provisioned all detected cases up to 2020, as indicated in the recovery rate in the overpayments ageing report. However, only 20 per cent of the original overpayments had been recovered.

61. Moreover, of the total overpayments due to death, 1,498 cases had no recovery recorded up to 31 August 2022, equivalent to 76.52 per cent of the overpayment balance. The breakdown of those cases is shown in table II.3.

Table II.3
Overpayments without recoveries as at 31 August 2022
(United States dollars)

Period	*Number of cases*	*Balance*
2003–2008	35	116 874
2009–2014	270	1 068 778
2015–2020	779	3 644 913
2021	207	914 914
2022	207	1 113 629
Total	**1 498**	**6 859 108**

Source: Based on overpayments ageing report as at 31 August 2022.

62. The Board considers that, after several attempts by the Fund to contact relatives of the deceased beneficiaries for the restitution of overpayments without any response, there is a high level of uncertainty regarding current and future recovery of the funds, taking into consideration the fact that paying back the overpayments to the Fund is not an obligation for the beneficiaries’ relatives.

63. In addition, considering that the write-offs disclosures by management in the long-form report have been a recurring matter of interest for the Advisory Committee and other Fund stakeholders, the Board considers that proceeding with the write-off process and the consequential disclosure of all overpayments for those in which there is no recovery expectation contribute to enhancing communication between the Fund and the users of such information.

64. **The Board recommends that the Pension Administration revise and adjust the write-off policy, taking into consideration the nature and different factors**

that would contribute to further categorizing the overpayments made, and then proceed with the write-off, if applicable.

65. The Pension Administration accepted the recommendation.

Undefined targets on the gender strategy

66. Following the adoption in 2015 of Sustainable Development Goal 5 on gender equality as part of the 2030 Agenda for Sustainable Development, the Secretary-General launched a system-wide strategy on gender parity in September 2017, which includes recommended actions to reach gender parity. While the goal is 50/50 parity, it is recognized that sustainability at that number is unlikely, and for the purposes of the strategy, parity is considered to be within the margin of 47 per cent to 53 per cent.

67. Likewise, to achieve gender parity and improve the working environment and the opportunities for its female staff, the Fund introduced a gender strategy and action plan for the period 2021–2023 to guide its efforts to build gender parity at the Fund.

68. In the Fund's gender strategy analysis, the Board observed that the strategy developed did not include what percentage or margin the Fund meant by parity.

69. Thus, on the basis of the target and margin established by the United Nations system-wide strategy, the Board reviewed the gender parity of the Fund's staff as at 31 August 2022, and noted the following:

(a) Of the total staff of the Fund, 56 per cent were women and 44 per cent were men;

(b) For staff in the General Service category, 66 per cent were women and 34 per cent were men, who were still underrepresented;

(c) For staff in the Professional category, 45 per cent were women and 55 per cent were men, with women still underrepresented;

(d) At the D-2, D-1, P-4 and P-3 levels, the Secretary-General's target, which states that each level must have at least 47 per cent female representation, was not met;

(e) At the P-2, G-7, G-6, G-5 and G-4 levels, female representation far exceeded the 53 per cent top margin for gender parity.

70. The Board considers that the Fund needs to establish its own target and margin for gender parity to fulfil the objective of Goal 5 on gender equality effectively. In addition, the Board considers that the Fund should comprehensively evaluate overrepresentation at different levels.

71. The Board acknowledges the efforts made by the Fund in terms of a gender perspective. However, performance against targets and indicators still needs to be improved to ensure equal gender representation.

72. **The Board recommends that the Fund, on the basis of analysis, include in its gender strategy a specific target and margin of gender parity that it aims to accomplish.**

73. The Fund accepted the recommendation.

C. Transmissions of information by management

1. Write-off of losses of cash, receivables and property

74. During the year 2022, the Pension Administration recorded receivable write-offs for $1,479,986.73 as a result of normal business operations in accordance with

the established policy on benefit overpayments receivable. There were no write-offs of receivables from the Office of Investment Management. There were no write-offs of losses of cash or property, in the respective areas of responsibility.

2. Ex gratia payments

75. The Fund reported to the Board that there were no ex gratia payments in 2022.

3. Cases of fraud and presumptive fraud

76. The Fund reported that there was no case of fraud and presumptive fraud related to the staff of the Fund for the financial year ended 31 December 2022.

D. Acknowledgement

77. The Board expresses its sincere appreciation and gratitude to the Representative of the Secretary-General for the investment of the assets of the Fund, the Chief Executive of Pension Administration and the members of their staff for the assistance and cooperation extended during the conduct of the audit.

(*Signed*) **Hou** Kai
Auditor General of the People's Republic of China
Chair of the Board of Auditors

(*Signed*) Jorge **Bermúdez**
Comptroller General of the Republic of Chile
(Lead Auditor)

(*Signed*) Pierre **Moscovici**
First President of the Court of Auditors of France

26 July 2023

Annex

Status of implementation of recommendations up to the financial year ended 31 December 2021

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	Status after verification: Implemented	Under implementation	Not implemented	Overtaken by events
1	2017	A/73/5/Add.16, chap. II, para. 62	The Board further recommends that the Fund develop an automatic signature verification system to facilitate the certificate of entitlement process.	The automated signature verification system has been in production since December 2022. The new system allows for the verification of signatures in all document types and intake methods.	The Board verified that the automated signature verification system went live in December 2022, which would facilitate different processes carried out by the Fund, including the certificate of entitlement process. Therefore, the recommendation has been implemented.	X			
2	2019	A/75/5/Add.16, chap. II, para. 121	The Board recommends that the Office of Investment Management incorporate the policy on the operations and risk management of external managers into the investment policy, considering that 15 per cent of the portfolio is externally managed.	The investment policy statement has been approved and is available on the website of the Fund.	The Board observed that the Office of Investment Management had incorporated the policy on the operations and risk management of external managers into the new investment policy approved in September 2022. Therefore, the recommendation is considered to have been implemented.	X			
3	2019	A/75/5/Add.16, chap. II, para. 154	The Board recommends that the Office of Investment Management establish a formal procedure among the legal team, Senior Investment Officers and operations team to obtain timely information about the deals that have been closed during the year for preparing the note on investment commitments in the notes to the financial statements.	A structured process was implemented involving the legal team, Senior Investment Officers and operations team to obtain timely information about completed deals throughout the year to facilitate the preparation of the note on investment commitments in the notes to the financial statements.	The Board verified that the Office of Investment Management had established a procedure among the parties involved in order to obtain timely information that allows for the preparation of the note on investment commitments. Therefore, the recommendation is considered to have been implemented.	X			

						Status after verification			
No.	*Audit report year*	*Report reference*	*Recommendation*	*Management response*	*Board's assessment*	*Implemented*	*Under implementation*	*Not implemented*	*Overtaken by events*
4	2019	A/75/5/Add.16, chap. II, para. 160	The Board recommends that the Office of Investment Management develop a digital repository/file with all information for each fund needed to support the acquisition process, from the evaluation stage to the point at which the transaction has been deemed satisfactory from a business and legal perspective and has satisfied any conditions imposed by the Private Markets Committee.	A repository was developed containing all the necessary information for each fund. The repository supports the acquisition process, from the evaluation stage to the point at which the transaction has been deemed satisfactory from both a business and legal perspective and has satisfied any conditions imposed by the Private Markets Committee.	The Board verified that the repository developed by the Office included the required information for the different stages of the acquisition process. Therefore, the recommendation has been implemented.	X			
5	2019	A/75/5/Add.16, chap. II, para. 161	The Board recommends that the Office of Investment Management develop, document and implement a detailed procedure that establishes the stages for closing an agreement of real assets and alternative investments.	The investment procedure was updated to reflect the stages for closing agreements and was implemented successfully.	The Board verified that the Office of Investment Management had updated the investment procedures and included the different stages for closing real assets and alternative investment agreements. Hence, the recommendation is considered to have been implemented.	X			
6	2020	A/76/5/Add.16, chap. II, para. 42	The Board recommends that the Pension Administration design, develop and implement a control mechanism that establishes periodic reviews of the data quality, in conjunction with the member organizations and beneficiaries of the Fund, if necessary, with the purpose of maintaining the data and preventing potential inconsistencies in the information recorded in the Integrated Pension Administration System and	Data quality roles are defined/embedded in established organizational structures and governance arrangements with the Fund's member organizations. At the internal level, the business intelligence tool highlights key data issues to provide insight and direction for the Fund's data quality actions. Data quality actions are ongoing as the offices involved address data issues as identified by the business intelligence dashboard and in relation to their	The Board verified that the Pension Administration had implemented controls to identify missing data or when data fixes are needed. This also allows continuous follow-up on these fixes, as required. Therefore, the recommendation is considered to have been implemented.	X			

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	Status after verification: Implemented	Under implementation	Not implemented	Overtaken by events
			ensuring the reliability of the information provided to users.	respective areas of responsibility, with increasing interaction with the Fund's member organizations. A data quality working group was established to further support the ongoing actions completed by various offices. Complementarily, the Fund has made available to its member organizations dedicated intranet pages, business intelligence dashboards and training to assist in the data quality actions that fall under the responsibility of its member organizations.					
7	2020	A/76/5/Add.16, chap. II, para. 43	The Board also recommends that the Pension Administration perform an analysis to define the circumstances in which the inconsistencies in the key data used for the actuarial valuation become material and to define tolerance thresholds in order to make the criteria used transparent for future reviews.	The consulting actuary submits a data request for the actuarial valuation and currently specifies in the request the data fields that are essential to carrying out the actuarial valuation. The data request also specifies the data checks on key items that are deemed essential for completeness. In exceptional circumstances, the consulting actuary would request input from the Fund when records essential for the actuarial valuation are missing, where they may have had to apply prudent assumptions.	The Board verified that the Pension Administration had defined the key census data fields in conjunction with the consulting actuary. In addition, the Fund agreed that the review of the key data should be performed before the actuary makes any assumption. Therefore, the recommendation is considered to have been implemented.	X			
8	2020	A/76/5/Add.16, chap. II, para. 71	The Board recommends that the Pension Administration develop and implement an official procedure that specifies the review by the Fund and the United Nations of the after-service health insurance census data and	A procedure was prepared and issued for the review of the post-employment benefits census data. The procedure provides details on the reports generated from the review.	The Board verified that the Pension Administration had developed and approved a procedure for after-service health insurance census data, which includes the validations/ controls, tolerable thresholds, staff responsible and	X			

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	*Status after verification*			
						Implemented	*Under implementation*	*Not implemented*	*Overtaken by events*
			includes the validations and/or controls, the tolerable thresholds for any deviation, the responsible officials and the deadlines associated with the review, as well as details of the communications that will be carried out between the Fund and the United Nations.		communication with the United Nations. Therefore, the recommendation is considered to have been implemented.				
9	2020	A/76/5/Add.16, chap. II, para. 72	The Board also recommends that the Pension Administration issue an official report with the results of the review and of the adjustments made to the after-service health insurance census data each year, in order to support the reasonableness review performed in the context of the preparation of the financial statements.	The procedure for the review of the post-employment benefits census data provides details on the reports generated from the review. Since the valuation takes place once every two years, the next after-service health insurance census data review, for the year 2023, is expected between December 2023 and February 2024.	Since the next valuation will be performed in 2023, the Pension Administration has not issued an official report with the results of the review and the adjustments made to the after-service health insurance census data. Therefore, the Board considers that the recommendation is under implementation.		X		
10	2020	A/76/5/Add.16, chap. II, para. 121	The Board also recommends that the Office of Investment Management enable the broker account module to include the direct broker feeds for the verification of staff members' brokerage accounts to comply adequately with the best practices of the industry and contribute to mitigating the risks related to potential conflicts of interest with the activities of the Fund.	The implementation of the recommendation has started, and the project is being implemented in phases in order to mitigate any issues, given the number of staff and the potential number of broker feeds that need to be established.	Considering that the broker account module has not been enabled in the system, the Board deems that the recommendation is under implementation.		X		

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	Status after verification: Implemented	Under implementation	Not implemented	Overtaken by events
11	2020	A/76/5/Add.16, chap. II, para. 133	Furthermore, the Board recommends that the Office of Investment Management establish a procedure that defines the criteria that should be weighed when a reputational risk event arises so that the Office's staff members can take the necessary measures before the reputational risk materializes.	The reputational risk policy was revised to include the criteria that should be weighed when a reputational risk event arises. The revised policy was approved by the Representative of the Secretary-General.	The Board noted that the new reputational risk policy establishes a procedure that complies with the requested criteria. Therefore, the recommendation is considered to have been implemented.	X			
12	2020	A/76/5/Add.16, chap. II, para. 134	The Board also recommends that the Office of Investment Management keep a permanent and updated record of the reputational risks assessed during the year, with the respective action taken in that regard, for all activities within the scope of the Office (including vendors, external managers, advisers and other third parties).	This was included in the reputational risk policy. The revised policy was approved by the Representative of the Secretary-General.	The Board noticed that the Office of Investment Management keeps a permanent and updated record of the reputational risks assessed during the year for all activities within the scope of the Office, along with the corresponding action taken in that regard. Therefore, the recommendation is considered to have been implemented.	X			
13	2020	A/76/5/Add.16, chap. II, para. 159	The Board also recommends that the Office of Investment Management strengthen and evaluate its current control mechanisms to ensure comprehensive and effective monitoring of the management of external advisers on an ongoing basis, allowing the Office to identify, evaluate and mitigate potential investment, operational and reputational risks.	An updated external adviser policy was endorsed and the recommendation was implemented successfully.	The Board verified that the Office of Investment Management had developed the enterprise vendor management and revised the adviser policy, which includes controls for the ongoing monitoring of external advisers. Therefore, the recommendation is considered to have been implemented.	X			

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	Status after verification: Implemented	Under implementation	Not implemented	Overtaken by events
14	2020	A/76/5/Add.16, chap. II, para. 160	The Board further recommends that the Office of Investment Management establish a procedure that defines the steps of the due diligence process that is performed on non-discretionary advisers after onboarding, including which aspects will be addressed in that process, when and how often it should be done, which reports and results are generated from the review and who is responsible, among other things.	A procedure encompassing the various requirements outlined in the recommendation was implemented by the management.	The Board noted that the Office of Investment Management had implemented the enterprise vendor management and revised the adviser policy, which includes the various due diligence steps. Therefore, the recommendation is considered to have been implemented.	X			
15	2021	A/77/5/Add.16, chap. II, para. 27	The Board recommends that the Fund carry out an analysis of the categories that present the most significant differences between what is approved and what is executed, to improve the budgetary estimates and thus make budget proposals more accurate and better adjusted to actual expenditure made in the execution period.	The Fund is working to define additional key performance indicators linked with the main budgetary categories that will be included in the budget proposal for 2024.	Since the Fund is in the process of defining additional suitable key performance indicators linked to the main budgetary categories to determine and justify resource requirements with the governance bodies, the Board deems that the recommendation is under implementation.		X		
16	2021	A/77/5/Add.16, chap. II, para. 32	The Board recommends that the Fund define and implement key performance indicators linked to the main budgetary categories, for example, staff costs and contractual services, to determine and justify the resource requirements with the governance bodies.	As part of the review of key performance indicators, the metrics that inform budget planning were included in the Fund's budget proposal for 2024, which requires the approval of the Fund's governing bodies.	Considering that the Fund is yet to define additional key performance indicators linked to the main budgetary categories, the Board views the recommendation to be under implementation.		X		

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	Status after verification: Implemented	Under implementation	Not implemented	Overtaken by events
17	2021	A/77/5/Add.16, chap. II, para. 48	The Board recommends that the Pension Administration finalize and implement a formal action plan for each pillar of the strategy, which includes critical success factors, objectives, activities, projects, milestones, staff responsible, key results indicators and key performance indicators.	Several projects and initiatives have been identified and prioritized under each of the three pillars of the strategy. The project managers of these prioritized projects work with their respective project boards to validate and achieve the milestones for each of the deliverables. The Fund tracks and monitors the progress of each of these projects and initiatives. The key performance indicators associated with each of the projects are captured and monitored in a project management tool introduced to monitor the projects and initiatives undertaken in the framework of the strategy. The project plan and associated activities/milestones are tracked under the "project plan" of the tool. Other relevant information such as responsible staff and metrics are also tracked under the project information.	The Board reviewed the action plan developed by the Pension Administration for each of the pillars of the strategy and verified that it includes projects, staff responsible and metrics, among other things. Therefore, the recommendation is considered to have been implemented.	X			
18	2021	A/77/5/Add.16, chap. II, para. 49	The Board recommends that the Pension Administration enhance the monitoring and regular review of the workplan to ensure the fulfilment of the strategic plan in the remaining period.	The project management tool is connected to business intelligence dashboards that are being used to monitor and review the projects and initiatives tied to the three pillars of the strategy on a regular basis. The Fund's management reviews at its meetings and on a regular basis the status of the strategy and related indicators.	The Board analysed and verified that the measures taken by the Fund to monitor and regularly review the established workplan contribute to ensuring the fulfilment of the strategic plan. Therefore, the recommendation is considered to have been implemented.	X			

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	Status after verification: Implemented	Under implementation	Not implemented	Overtaken by events
19	2021	A/77/5/Add.16, chap. II, para. 50	The Board recommends that the Pension Administration develop and implement a dashboard incorporating key results and key performance indicators using a business intelligence technology platform to review and monitor performance and assist in taking corrective action, as required.	A set of indicators to measure and monitor the achievement of the strategic plan was defined, and the implementation of these metrics in a dashboard is being explored.	Since the Pension Administration has not yet developed and implemented a dashboard incorporating key results and key performance indicators as required, the Board considers this recommendation to be under implementation.		X		
20	2021	A/77/5/Add.16, chap. II, para. 57	The Board recommends that the Pension Administration take the measures necessary to further define the functions and responsibilities and the terms of reference for both the Business Transformation and Accountability Unit and the Data Analysis Unit.	The functions and responsibilities and terms of reference for the Business Transformation and Accountability Unit and the Data Analysis Unit have been updated to comply with the requirements.	The Pension Administration has established the terms of reference of the Business Transformation and Accountability Unit and the Data Analysis Unit, which were approved in March and April 2023, respectively. Both documents are available to staff on the Fund's intranet page. Therefore, the Board considers this recommendation to have been implemented.	X			
21	2021	A/77/5/Add.16, chap. II, para. 58	The Board recommends that the Pension Administration finalize and formalize the workplans, including activities, responsibilities and timelines, given the remaining two years of the strategy, for the Business Transformation and Accountability Unit and the Data Analysis Unit and monitor the progress on and achievement of the objectives of the Units.	The workplans for the Business Transformation and Accountability Unit and the Data Analysis Unit have been updated, defining the reporting line.	The Board noted that the Pension Administration had formalized the workplans, including activities, responsibilities and timelines for both units, which are monitored by the Deputy Chief Executive of the Pension Administration and senior management as appropriate. Therefore, the recommendation is considered to have been implemented.	X			

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	*Status after verification*			
						Implemented	*Under implementation*	*Not implemented*	*Overtaken by events*
22	2021	A/77/5/Add.16, chap. II, para. 59	The Board recommends that the Pension Administration set key performance indicators for the Business Transformation and Accountability Unit and the Data Analysis Unit in order to measure their performance and contribution to the achievement of the strategy.	Based on the updated Business Transformation and Accountability Unit and the Data Analysis Unit terms of reference, suitable performance measures for both units were identified and aligned with the Fund's strategy.	The Board verified that the Pension Administration had established key performance indicators for both units in their terms of references. The key performance indicators are aligned with its strategy. Therefore, the recommendation is considered to have been implemented.	X			
23	2021	A/77/5/Add.16, chap. II, para. 72	The Board recommends that the Pension Administration develop and implement an action plan in the short term to fix erroneous, missing and incomplete data with business owners of the different processes that input data into the Integrated Pension Administration System, to ensure that the information is accurate for the actuarial valuation and benefits processing by the Fund.	Data quality roles are defined/embedded in established organizational structure and governance arrangements with the Fund's member organizations. At the internal level, the business intelligence tool highlights key data issues to provide insight and direction for the Fund's data quality actions. Data quality actions are ongoing as the offices involved address data issues as identified by the business intelligence dashboard and in relation to their respective areas of responsibility, with increasing interaction with the Fund's member organizations. A data quality working group was established to further support the ongoing actions completed by various offices. Complementarily, the Fund has made available to its member organizations dedicated intranet pages, business intelligence dashboards and training to assist in the data quality actions that fall under the responsibility of the Fund's member organizations.	The Board verified that the Pension Administration had developed controls to identify incomplete or erroneous data or when such data needed to be fixed, allowing continuous follow-up and fixes, as required. Therefore, the Board considers the recommendation to have been implemented.	X			

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	Status after verification: Implemented	Under implementation	Not implemented	Overtaken by events
24	2021	A/77/5/Add.16, chap. II, para. 80	The Board recommends that the Pension Administration broaden the established benchmarks for main benefits and other key processes, especially those related to participants and beneficiaries, with the purpose of measuring and knowing the overall performance of the Fund better.	A set of key performance indicators was developed for other processes. Key performance indicators include benchmarks for key benefit recalculations such as survivors' benefit (after service), deferred benefits into payment, child benefits into payment and two-track payments. A business intelligence dashboard was developed to enable tracking of the key performance indicators for recalculations.	The Board noted that the Pension Administration had established benchmarks for the main benefits and other key processes, which are monitored through the business intelligence participants and recalculations dashboards. Therefore, the recommendation is considered to have been implemented.	X			
25	2021	A/77/5/Add.16, chap. II, para. 86	The Board recommends that the Pension Administration carry out an analysis and issue a management information report on the age profile of the Fund's participants.	The age profile of participants is monitored through an existing report on the participants' business intelligence reporting tool, which is available to the Fund's member organizations. From a solvency perspective, the Fund's evolving participant and retirement patterns are monitored through the biennial experience analysis. The experience analysis is considered by the Committee of Actuaries and later presented to the Board.	The Pension Administration issued a report on the age profile of the Fund's participants through the business intelligence participants dashboard, which is available to the member organizations. Therefore, the Board considers the recommendation to have been implemented.	X			
26	2021	A/77/5/Add.16, chap. II, para. 100	The Board recommends that the Pension Administration develop and implement automatic synchronization between both interfaces, in order to avoid the reprocessing of files and potential data inconsistencies.	A system enhancement was implemented to ensure that financial files are not processed in the Integrated Pension Administration System until human resources data are up to date.	The Board verified that the Pension Administration had enhanced the automatic synchronization between the interfaces, adding new parameters to run the process. Therefore, the recommendation is considered to have been implemented.	X			

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	Status after verification: Implemented	Under implementation	Not implemented	Overtaken by events
27	2021	A/77/5/Add.16, chap. II, para. 101	The Board recommends that the Pension Administration continue to advance and collaborate with the member organizations in the interface implementation project, defining a workplan to increase, in the short term, the financial interfaces of those entities that already have a human resources interface.	The Pension Interface Programme includes a series of projects to support the Fund, enhance and develop interface systems, implement roll-out to member organizations and produce relevant business intelligence dashboards. The Fund has selected member organizations to be onboarded to stage-2 and stage-3 interfaces in the short and medium term. The project direction team for the Pension Interface Programme regularly reviews the progress made. The Fund has identified candidates for the next financial interface projects and is exploring the readiness and feasibility of these and other organizations and the Fund for implementation.	The Board verified the progress in incorporating new interfaces with other member organizations. Some of these interfaces are already operational, while others are at different stages of implementation. Currently, the project is being closely monitored and has a defined workplan for the short and medium term. Therefore, the recommendation is considered to have been implemented.	X			
28	2021	A/77/5/Add.16, chap. II, para. 109	The Board recommends that the Office of Investment Management establish a procedure and adopt the measures necessary to ensure that investment officers on annual leave or who are absent do not participate in or approve any commercial transaction involving the movement of funds and securities transactions, and that backup staff are in place to ensure that there is no interruption in the process.	The mandatory leave policy was revised and approved by the Compliance Committee.	The Board verified that the Office of Investment Management had established a procedure to suspend the accounts of those on leave, to avoid their participation in any transaction, with back-up assigned for such purposes. Therefore, the recommendation is considered to have been implemented.	X			

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	Status after verification: Implemented	Under implementation	Not implemented	Overtaken by events
29	2021	A/77/5/Add.16, chap. II, para. 110	The Board recommends that the Office of Investment Management strengthen and evaluate its current monitoring mechanism over users' accounts in the Bloomberg system in order to keep track of the investment officers who can approve transactions through the system during staff leave or absences.	The mandatory leave policy was revised to reflect the new preventative control mechanism, which was implemented. Trading privileges are suspended during mandatory leave and absences.	The Board analysed the actions taken by the Fund and considers that the Office of Investment Management has strengthened and evaluated its current monitoring mechanism over users' accounts in the Bloomberg system in accordance with the required terms. Therefore, the recommendation is considered to have been implemented.	X			
30	2021	A/77/5/Add.16, chap. II, para. 119	The Board recommends that the Office of Investment Management strengthen and update the current procedure for brokers and counterparties, including the standards that brokers and counterparties need to meet, the reports and reviews currently carried out by the risk team and the Risk Committee and the criteria that need to be weighed and evaluated in the removal of or decision to retain brokers and counterparties.	An alternative solution to ensure a uniform application of this measure is being explored.	The Board noticed that the Office of Investment Management was working on updating the procedure for brokers and counterparties. Therefore, the recommendation is considered to be under implementation.		X		
31	2021	A/77/5/Add.16, chap. II, para. 132	The Board recommends that the Office of Investment Management re-evaluate the current application of the evaluation report used for the evaluation of brokers and counterparties and enhance their monitoring, in order to ensure that these are assessed in accordance with the service or transactions provided during the period under evaluation,	Current application of the evaluation report used for the evaluation of brokers and counterparties was re-evaluated in order to ensure that they were assessed in accordance with the service or transactions provided during the period under evaluation, displaying "not applicable" when any brokers or counterparties had not transacted with the Fund.	The Board checked the brokers' evaluation report and verified that those evaluated corresponded to those that had provided services or made transactions during the period; otherwise, their evaluation was displayed as "not applicable". Therefore, the recommendation is considered to have been implemented.	X			

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	Status after verification: Implemented	Under implementation	Not implemented	Overtaken by events
			with the purpose of measuring actual performance and preventing the Best Execution Committee from making any erroneous decisions.						
32	2021	A/77/5/Add.16, chap. II, para. 141	The Board recommends that the Office of Investment Management establish a maximum term in the investment process for private markets as from their first and second approvals to the signing of the agreements of no more than one calendar year, in order for it to be properly aligned with the annual strategic plan and pacing strategy for private markets.	The private markets procedures have been revised, and a maximum duration for the approval of agreements was introduced.	The Board verified that the updated private markets procedure indicated that the signature for contract approvals must not exceed one calendar year. Therefore, the recommendation is considered to have been implemented.	X			
33	2021	A/77/5/Add.16, chap. II, para. 152	The Board recommends that the Office of Investment Management evaluate and redesign its current mechanism for monitoring the monthly requirements, in order to ensure that compliance with the monthly review is strictly fulfilled, with the purpose of adopting the measures necessary to address cases in which deviations are detected.	The investment management agreements were modified to clarify reporting mechanisms.	The Board verified that the Office of Investment Management had evaluated and redesigned the monitoring mechanism for the monthly reviews to detect deviations. Therefore, the recommendation is considered to have been implemented.	X			
34	2021	A/77/5/Add.16, chap. II, para. 153	The Board recommends that the Office of Investment Management develop and implement an electronic platform or solution that allows for the receipt of the reports by external	A solution was developed to address this issue and the Board was asked to consider that the recommendation had been implemented.	The Board verified that the solution allows the Office of Investment Management to receive the required reports directly from the external managers, tracking all requirements and delays.	X			

No.	Audit report year	Report reference	Recommendation	Management response	Board's assessment	Status after verification: Implemented	Under implementation	Not implemented	Overtaken by events
			managers in order to track all requirements and delays incurred by each external manager to ensure the timely review by the Office.		Therefore, the recommendation is considered to have been implemented.				
35	2021	A/77/5/Add.16, chap. II, para. 165	The Board recommends that the Office of Investment Management increase the frequency of user access reviews and update version 1.4 of the access control procedure and version 1.2 of the information security operations and monitoring process procedure.	Version 1.4 of the access control procedure and version 1.2 of the information security operations and monitoring process procedure were updated, and the frequency of the user access review was increased.	The Board verified that the Office of Investment Management had updated and approved the information security operations and monitoring process procedure and the access control procedures that increase the frequency of the user access review. Therefore, the recommendation is considered to have been implemented.	X			
	Total number of recommendations				**35**	**29**	**6**	**0**	**0**
	Percentage of total number of recommendations				**100**	**83**	**17**	**0**	**0**

Chapter III
Certification of the financial statements

Letter dated 31 May 2023 from the Chief Financial Officer of the United Nations Joint Staff Pension Fund addressed to the Chair of the Board of Auditors

The financial statements of the United Nations Joint Staff Pension Fund for the year ended 31 December 2022 have been prepared in accordance with the Regulations, Rules and Pension Adjustment System of the United Nations Joint Staff Pension Fund,[3] International Public Sector Accounting Standards (IPSAS) as issued by the International Public Sector Accounting Standards Board, and International Accounting Standard 26, Accounting and reporting by retirement benefit plans, as issued by the International Accounting Standards Board. The summary of significant accounting policies applied in the preparation of the financial statements is included in the notes to the financial statements. The notes provide additional information on and clarification of the financial activities undertaken by the Fund during the period covered by these statements.

I certify that the appended financial statements of the United Nations Joint Staff Pension Fund are correct in all material respects.

(*Signed*) Karl-Ludwig W. **Soll**
Chief Financial Officer
United Nations Joint Staff Pension Fund

[3] The financial rules are promulgated by the United Nations Joint Staff Pension Board in accordance with article 4 (b) of the Regulations of the Fund with effect from 1 January 2017. Subject to the provisions of the Regulations of the Fund and to resolutions and decisions of the General Assembly pertaining to the financial operations of the Fund, those financial rules shall govern the financial management and administration of the Fund and should be read in conjunction with the Administrative Rules. With regard to any matter not specifically covered by those rules, the appropriate provisions of the Financial Regulations and Rules of the United Nations shall apply, mutatis mutandis.

Statement of internal control for the year ended 31 December 2022[4]

Scope of responsibility

The United Nations Joint Staff Pension Fund was established by the General Assembly in 1949 to provide retirement, death, disability and related benefits for staff of the United Nations and the other international organizations admitted to membership in the Fund. The Fund is a multiple-employer defined benefit plan.

The United Nations Joint Staff Pension Board, a subsidiary organ of the General Assembly, has the overall supervisory responsibility for the administration of the Fund and the observance of the Regulations and Rules of the Fund.

The Chief Executive of Pension Administration discharges the Pension Board's responsibility for the administrative supervision of the Pension Administration. Under the authority of the Board, the Chief Executive collects contributions, ensures record-keeping for the Pension Administration, certifies benefit payments and deals with other issues related to the Fund's participants and beneficiaries. The Chief Executive is also responsible for ensuring that actuarial matters are addressed with a view to maintaining the long-term sustainability and financial health of the Fund.

The investment of the assets of the Fund is the responsibility of the Secretary-General. The Secretary-General has delegated his authority and responsibility to act on his behalf in all matters involving his fiduciary duties related to the investment of the assets of the Fund to the Representative of the Secretary-General. The Representative of the Secretary-General has delegated responsibility for the management and accounting of the investments of the Fund and for the management of the Office of Investment Management. The Representative of the Secretary-General exercises this duty and makes investment decisions after consultation with the Investments Committee and in the light of observations made from time to time by the Pension Board on investment policy.

The Chief Executive and the Representative of the Secretary-General are responsible for establishing and maintaining a sound system of internal controls in their respective areas of responsibility to ensure the accomplishment of objectives, the economical use of resources, the reliability and integrity of information, compliance with rules and regulations, and the safeguarding of assets.

Purpose of the system of internal control

The system of internal control is designed to reduce and manage rather than eliminate the risk of failure to achieve the objectives of the Fund and to improve performance. It can therefore provide only a reasonable but not an absolute assurance of effectiveness. Internal control is an ongoing process, effected by the Fund's governing bodies, senior management and other personnel, designed to provide reasonable assurance regarding the achievement of the following internal control objectives:

- Effectiveness and efficiency of operations
- Reliability of financial reporting
- Compliance with applicable rules and regulations

[4] The statement of internal control, which accompanies the financial statements, is issued by the Chief Executive of Pension Administration and the Representative of the Secretary-General for the investment of the assets of the United Nations Joint Staff Pension Fund in accordance with financial rule G.4 of the Fund.

Internal control is a key function of management and an integral part of the overall process of managing operations. The Fund management at all levels therefore has the responsibility to:

- Establish an environment and culture that promotes effective internal control
- Identify and assess risks that may affect the achievement of objectives
- Specify and implement policies, plans, operating standards, procedures, systems and other control activities to manage risks
- Ensure an effective flow of information and communication so that all Fund staff have the information that they need to fulfil their responsibilities
- Monitor the effectiveness of the internal control system

Operating environment of the Fund

The Fund is exposed by its plan design, investments and operations to the fluctuations of financial markets, demographic changes, internal risks related to its operations and risks affecting its member organizations, service providers or clients located in more than 190 countries. All significant identified risks are captured in formal risk registers, which are subject to regular review by senior managers and internal and external auditors.

Fund risk management and internal control framework

The Fund has implemented a governance structure, management processes and internal and external oversight mechanisms to adequately identify, assess, manage, monitor and report the risks inherent to its operations.

The internal control policy of the Fund defines internal control objectives, components and responsibilities, as well as the roles of management, risk management and compliance functions, internal audit and external audit, in line with the three lines of defence model. The Fund's internal controls over financial reporting provide reasonable assurance that assets are safeguarded, that transactions are properly recorded and authorized and that there are no material misstatements in the financial statements. The internal control system and the review of its effectiveness are consistent with the criteria established in the "Internal Control-Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

The internal control framework is integrated with and complemented by specific control frameworks to provide reasonable assurance on the use of information, consistent with the Control Objectives for Information and Related Technologies, and its integrity and availability, in accordance with the International Organization for Standardization ISO/IEC 27001 standard.

The enterprise-wide risk management framework adopted by the Fund reflects the nature of its operations and development and its specific requirements. The enterprise-wide risk management framework is aimed at identifying events that may affect the Fund and managing risk within the Fund's risk appetite. The Fund's risk management framework includes the following components:

- Risk management governance: The operation of the risk management framework is supported by the full ownership and accountability of the Pension Board, management and staff for risk management activities. Specialized committees conduct oversight and provide advice to the Pension Board on risk management and internal control, as follows:

  (i) Audit Committee: As an advisory Committee of the Pension Board, it provides general oversight and offers recommendations for the Fund's internal and external auditing, and the Fund's risk management and internal control framework.

(ii) Fund Solvency and Assets and Liabilities Monitoring Committee: It advises the Pension Board on risk management, funding policy, asset-liability management and investment policy matters.

At the management level, the Enterprise-wide Risk Management Working Group, chaired by the Chief Executive and the Representative of the Secretary-General, includes representatives from all offices and monitors the Fund's risk profile, the implementation of risk management strategies and the effectiveness of the enterprise-wide risk management framework.

- Enterprise-wide risk management policy: The policy provides the basis for the operation of the risk management framework and specifies its applicability throughout the Fund. The enterprise-wide risk management policy methodology complements the policy and defines the steps, roles and responsibilities in the risk management process. The policy complements the United Nations code of conduct and the standards of conduct and related administrative instructions and guidelines in articulating expectations and behaviours for risk-conscious decision-making.

- Risk assessments: The Fund conducts periodic risk assessment exercises and maintains an enterprise risk register, which serves as the basis for defining mitigation strategies or internal controls to address the Fund's key risks. Detailed risk registers supplement the enterprise risk register on business continuity risks and cybersecurity risks. Risk management is integrated into project management, with risk registers developed for projects.

- Risk monitoring: The Fund's risk profile is monitored during the quarterly meetings of the Enterprise-wide Risk Management Working Group. Risk management officers promote the implementation of the enterprise-wide risk management framework, facilitate risk assessments, advise in the implementation of risk management strategies and monitor and report on the Fund's risk profile. Frequent risk monitoring was enhanced with the introduction of a risk dashboard and additional key risk indicators, in order to better understand and assess enterprise risks.

- Fraud risk assessment: The Pension Administration and the Office of Investment Management perform fraud risk assessments to identify specific fraud schemes and risks, assess their likelihood and significance, evaluate existing fraud control activities, and implement actions to mitigate residual fraud risks.

Review of the effectiveness of internal controls

The review of the effectiveness of the Fund's internal controls for the year ended 31 December 2022 is supported by:

- Evaluation of internal controls over financial reporting by management, which involved the identification, documentation and evaluation of the design and operational effectiveness testing of internal controls; the preparation and implementation of mitigation plans to address any control deficiencies identified; and assertion letters submitted by key officers in the Pension Administration and the Office of Investment Management, who recognized their responsibility for maintaining and executing effective internal controls and reported any deficiencies identified. Internal control evaluations and assertion letters were reviewed carefully, and action plans to implement corrective actions were prepared, where applicable.

- In accordance with its mandate, the Office of Internal Oversight Services (OIOS), provided assurance that internal controls are adequate and functioning effectively. In the execution of a risk-based audit plan endorsed by the Audit Committee, OIOS conducted four audits, and two other audits were in progress at the end of 2022, to provide assurance on the effectiveness of internal controls and identify control deficiencies. OIOS made 23 new audit recommendations during 2022. The Chief Executive and the Representative of the Secretary-General, in their areas of responsibility, took appropriate actions to address important audit recommendations resulting from internal audits.

- In accordance with its mandate, the Board of Auditors examined independently the Fund's management, internal controls and financial statements, performing such tests and other procedures as they considered necessary to express an opinion in their annual audit report. The Board was given full and unrestricted access to all financial records and related data, and to the Fund's management and Audit Committee to discuss any findings related to the integrity and reliability of the Fund's financial reporting. The external audit report accompanies the financial statements.

- The review of the results of independent service audits on the controls applied by key service providers, including Northern Trust, the master record keeper for the Fund's investments and the custodian banks for the investments, as well as the United Nations International Computing Centre information and communication technology (ICT) services and related controls over financial reporting. Service audits concluded that, in all material respects, the controls were suitably designed and operating effectively to provide reasonable assurance that control objectives would be achieved.

- In December 2022, the Pension Administration renewed its ISO 27001:2013 Information Security Management System certification for the Integrated Pension Administration System, the scope of which was extended to the digital certificate of entitlement, which is valid for three years, until March 2025. In March 2021, the Office of Investment Management obtained certifications for ISO 22301:2019 for the Business Continuity Management System and ISO 27001:2013 for the Information Security Management System. In 2022, it was successfully recommended that the Office continue to retain both certifications. These remain valid until March 2024. The certifications confirm that the Office conforms to and is in compliance with the requirements of the information security management system and business continuity management system standards.

Internal control matters during 2022 and planned actions

The review of assertion letters signed by key officers in the Fund and the results of internal and external audits, independent service audits, and International Organization for Standardization certification audits provide assurance on the effectiveness of internal controls. No significant internal control matters were identified; however, the Fund will continue to review and improve internal controls, as follows:

1. In its previous report (A/77/5/Add.16), the Board did not identify significant errors, omissions or misstatements from the review of the financial records of the Fund for the year ended 31 December 2021. However, it identified scope for improvements in the areas of data quality, the strategic plan, benchmarks, budget management, trade approvals, private markets, brokers and counterparties, and external managers. Management accepted and has initiated the implementation of the recommendations made by the Board.

2. Investments and market risks (Office of Investment Management): During 2022, market volatility continued owing to the consequences arising from inflation and geopolitical crises. The impact of recent market movements and limitations on the convertibility of certain investments will be determined and monitored through ongoing monitoring of the markets. The Office also successfully implemented the new benchmarks and strategic asset allocation in 2022. In addition, the Fund continued to be compliant with the Global Investment Performance Standards. The Fund will conduct the quadrennial asset-liability management study in 2023.

3. Risks derived from inflation and geopolitical crises (shared): Geopolitical events early in 2022 contributed to a high inflation environment and highlighted the need to bolster the Fund's ability to monitor and mitigate geopolitical risks. As the global effects of geopolitical disruptions in 2022 are still present, the Fund continues to diversify channels to distribute pension benefit payments, including through the United Nations Treasury, and to offer new digital services to lower banking charges for beneficiaries located in countries affected by disruptions in the international transaction system. The Fund will continue to monitor possible financial and operational impacts of the high inflation environment and take prompt action within its regulatory framework to mitigate potential risks derived from inflation and geopolitical crises. The asset-liability management study is expected to reflect the structural changes in the market. The impact of inflation and geopolitical crises will be analysed.

4. Organizational culture and change management (shared): Strengthening the Fund's culture has been identified by management as key for the success of the Fund's overall strategy. A leadership culture assessment in line with the United Nations system leadership framework was conducted in 2021 and 2022 with the participation of a majority of Fund staff to identify priorities for culture-related work. The Business Support Services Unit was launched in 2022 and has been instrumental in advancing the implementation of the human resources strategy and the culture transformation plan. Among other key actions, a dedicated learning and development function was created in 2022 to support the implementation of the training strategy and guidelines, and the Fund's gender strategy and action plan were updated, resulting in an improved gender-balanced work environment. The implementation of human resources and culture transformation initiatives will continue, with a focus on promoting organizational values and priorities.

5. Business continuity management (shared): The Fund has gradually returned to a hybrid in-office work schedule in line with United Nations guidance for flexible working arrangements. The Fund monitored and introduced changes to crisis management and business continuity procedures and ICT systems to enable a faster recovery for critical business functions and to ensure staff safety and operational continuity in a hybrid working environment. The introduction of new benefit payment channels, automated scanning and signature verification, robotic process automation and new functionalities in the Fund's member self-service and the digital certificate of entitlement ensured the continuity of operations. In 2023, the Fund will explore upgrading its core ICT systems, deploy other digitalization initiatives and further strengthen internal controls.

6. Cybersecurity (shared): In 2022, the Pension Administration and the Office of Investment Management continued to enhance cybersecurity controls and programmes to respond to the evolving threat landscape and ensure that data assets remain protected. Both the Pension Administration and the Office maintain the ISO27001:2013 Information Security Management System certification to protect the Fund against cybersecurity threats with around-the-clock monitoring, escalation and response to security events. Cybersecurity training and awareness plans and the assessment of potential cyberrisks continue to increase the awareness of staff and key stakeholders on how to respond to threats. In the Pension Administration, a new project to introduce multi-factor authentication for access to the member self-service and the Fund's other portals will further secure connections and client transactions.

7. Data governance (shared): Both the Pension Administration and the Office of Investment Management have undertaken projects to develop and implement a data governance framework. Various components of the data governance framework are in development, including a data quality policy and a data inventory. A better understanding of data will allow the Fund to create a data strategy drawing on the

vision of the Secretary-General to support the Fund's strategy of becoming a data-driven organization and strengthening controls related to privacy and data protection.

8. Climate change (Office of Investment Management): As a signatory of the Principles for Responsible Investing, the Fund integrates environmental, social and governance factors into investment management decision-making processes, facilities, staff capacity-building and procurement. These factors include climate change, employment practices, inclusion and diversity. In 2022, the Office pursued the environmental, social and governance integration process initiated in previous years. In the 2021 Principles for Responsible Investing report for the year 2020, the Office obtained ratings from 4 to 5 stars (out of 5) for its environmental, social and governance programme. The Fund was ranked first in the 2021–2022 Responsible Asset Allocator Initiative Index and Leaders List Report. Three professional staff members joined the Sustainable Investing team, dedicated to each of the asset classes. The Office started to roll out environmental, social and governance certifications for its investment teams. It strengthened its existing environmental, social and governance policy with the adoption of a new policy, or manifest, which states the Office's beliefs and principles related to sustainability integration in the investment process as well as internal processes. In addition, the team developed Climate 2.0 and Equity 2.0 strategies, enhanced existing private-market environmental, social and governance integration techniques, and initiated a review of fixed-income environmental, social and governance processes. The Office further developed its impact investing strategy following the request by the General Assembly for the Fund to explore impact investing for part of the portfolio. The Office is on track to meet its carbon reduction targets by 2025 and is expanding the coverage of its targets to non-listed real estate as well as non-listed infrastructure. Lastly, the Fund became a signatory to the financial sector statement at the fifteenth Conference of the Parties to the Convention on Biological Diversity – a global initiative committing the financial community to contribute to the protection and restoration of biodiversity and ecosystems through financing activities and investments.

Statement

There are inherent limitations in the effectiveness of any internal control, including the possibility of human error or circumvention. Accordingly, even effective internal controls can provide only reasonable but not absolute assurance. Furthermore, because of changes in conditions, the effectiveness of internal controls may vary over time.

On the basis of the above, we conclude that, to our best knowledge and information, there were no material weaknesses in internal controls, in our respective areas of responsibility, during the year ended 31 December 2022.

Within the scope of our respective areas of responsibility, we are committed to addressing any weaknesses in internal controls identified during the year and ensuring continuous improvement in internal controls.

(*Signed*) Rosemarie **McClean**
Chief Executive of Pension Administration
United Nations Joint Staff Pension Fund

(*Signed*) Pedro **Guazo**
Representative of the Secretary-General
for the investment of the assets of the Fund

28 April 2023

Chapter IV
Financial overview

A. Message by the Chief Executive of Pension Administration and the Representative of the Secretary-General

1. Despite volatility in the global markets and geopolitical challenges in 2022, the United Nations Joint Staff Pension Fund remains financially sound and resilient, providing reliable services to its clients, while modernization efforts have continued.

2. The biennial actuarial valuation of the Fund as at 31 December 2021, as reviewed by the United Nations Joint Staff Pension Board in July 2022, reported a surplus. It established that the current contribution rate is sufficient for the Fund to remain sustainable over the long term, for current and future participants and beneficiaries. This meant that the Fund was in a strong position to absorb the market downturn in 2022, with the next actuarial valuation due to report to the Board in July 2024.

3. It is a fact that 2022 was a challenging year in terms of investment performance. However, when compared with our peers, we have been as effective at a substantially lower cost per assets under management over a five-year period. Since 1 January 2023, the value of the assets has regained 5 per cent, reaching over $82 billion as at 21 April 2023.

4. The Fund has continued to grow through an increase in participants and benefits in payment. While regarded as a mature fund, the balance between the number of participants and benefits in payment has remained stable in recent years. During 2022, the levels of contributions received and benefits paid were broadly similar in monetary terms, which exceeded the Fund's projections.

5. As in previous years, payments were issued on time and the banking crisis of the first months of 2023 had no impact on the distribution of benefits. The Fund continued to explore and set up new payment channels to ensure the transfer of benefit payments in countries with banking systems affected by geopolitical challenges. The Fund also outperformed its benchmark in pension processing, with more than 90 per cent of initial pension cases processed within 15 business days in 2022.

6. Meanwhile, the Fund has continued to modernize its operations, further simplifying and digitalizing interactions with its clients. We are particularly proud that one of the flagship projects, the digital certificate of entitlement application, won the United Nations Secretary-General's Award for innovation and sustainability in 2022.

7. We remain confident that the Fund will continue to deliver core services to its members while remaining sustainable over the long term.

B. Administration of the Fund

8. The Fund was established by the General Assembly in 1949 to provide retirement, death, disability and related benefits for staff of the United Nations and the other international organizations admitted to membership in the Fund.

9. The Pension Board, a subsidiary organ of the General Assembly, has the overall supervisory responsibility for the administration of the Fund and for the observance of the Regulations and Rules of the Fund. The Secretary-General appoints the independent Secretary of the Pension Board on the recommendation of the Pension Board. The Secretary of the Pension Board is responsible for a full range of secretariat conference management and services.

10. The Chief Executive of Pension Administration is appointed by the Secretary-General on the recommendation of the Pension Board. The Chief Executive acts under the authority of the Pension Board in the discharge of the latter's responsibility for the administrative supervision of the Fund as a whole.

11. The investment of the assets of the Fund is decided upon by the Secretary-General after consultation with an Investments Committee and in the light of observations and suggestions made from time to time by the Pension Board on the investments policy. The Secretary-General has delegated his authority and responsibility to act on his behalf in all matters involving his fiduciary duties related to the investment of the assets of the Fund to the Representative of the Secretary-General.

12. For detailed information about the purpose, administration, structure and management of the Fund, please refer to note 1 of the financial statements.

C. Key indicators

(Millions of United States dollars, except for the number of participants and the number of periodic benefits)

	Year				
	2022	*2021*	*2020*	*2019*	*2018*
Net assets available for benefits	77 918	91 460	81 512	72 034	60 776
Actuarial present value of accumulated plan benefits with pension adjustments	70 599	66 656	63 259	59 829	58 492
Net assets in excess of actuarial present value of accumulated plan benefits with pension adjustments	7 319	24 804	18 253	12 205	2 284
Investment (loss)/income	(13 458)	10 047	9 516	11 362	(3 307)
Pension contributions	3 121	2 969	2 847	2 689	2 457
Number of participants	143 612	137 261	134 632	131 583	128 594
Pension benefits	3 128	2 976	2 789	2 700	2 670
Number of periodic benefits	83 988	82 312	80 346	79 975	78 716
(Decrease)/increase in net assets available for benefits	(13 541)	9 948	9 477	11 258	(3 590)

D. Financial performance

Net assets available for benefits

13. The statement of net assets available for benefits provides information on the financial position of the Fund and presents the assets of the Fund less liabilities other than the actuarial present value of accumulated plan benefits. Meeting the requirements of International Accounting Standard 26, the Fund has opted to disclose the actuarial present value of accumulated plan benefits in a footnote.

14. Net assets available for benefits as at 31 December 2022 were $77,918.3 million (2021: $91,459.5 million), a decrease of $13,541.2 million (14.8 per cent).

15. The fair value of investments as at 31 December 2022 was $77,437.5 million (2021: $89,856.1 million), reflecting a decrease of $12,418.6 million (13.8 per cent). Details on the investment classes as at 31 December 2022 and 31 December 2021 are shown in the table below:

(Millions of United States dollars)

	31 December 2022	*31 December 2021*	*Change*	*Percentage*
Equities	39 246	52 022	(12 776)	(24.6)
Fixed income	24 132	24 742	(610)	(2.5)
Real assets	7 493	6 614	879	13.3
Alternatives and other investments	6 566	6 478	88	1.4
Investments	**77 437**	**89 856**	**(12 419)**	**(13.8)**
Cash and cash equivalents	750	1 625	(875)	(53.8)
Total	**78 187**	**91 481**	**(13 294)**	**(14.5)**

16. Total liabilities of the Fund as at 31 December 2022 were $691.4 million (2021: $309.6 million), an increase of $381.8 million, or 123.3 per cent. The increase in total liabilities was due primarily to the total increase in the amount payable from investments traded of $403.0 million.

Changes in net assets available for benefits

17. The statement of changes in net assets available for benefits provides information about the changes in the net assets of the Fund for a year categorized by investment income/(loss), pension contributions, pension benefits and administrative expenses.

18. There was a decrease in the net assets available for benefits for the year ended 31 December 2022 of $13,541.2 million (2021: increase of $9,947.9 million). The decrease was attributable primarily to investment loss for the year.

19. The investment loss for 2022 was $13,457.8 million (2021: income of $10,047.2 million). Investment loss for 2022 comprised mainly a net decrease in the fair value of investments of $14,739.9 million, dividend income of $830.2 million and interest income of $592.0 million.

20. Total contributions ($1,040.5 million from participants, $2,070.5 million from member organizations and $10.3 million from other contributions) for 2022 were $3,121.3 million (2021: $2,969.3 million), reflecting an increase of $152.0 million, or 5.1 per cent, compared with total contributions in 2021 (see sect. E, Participants and beneficiaries, for more details).

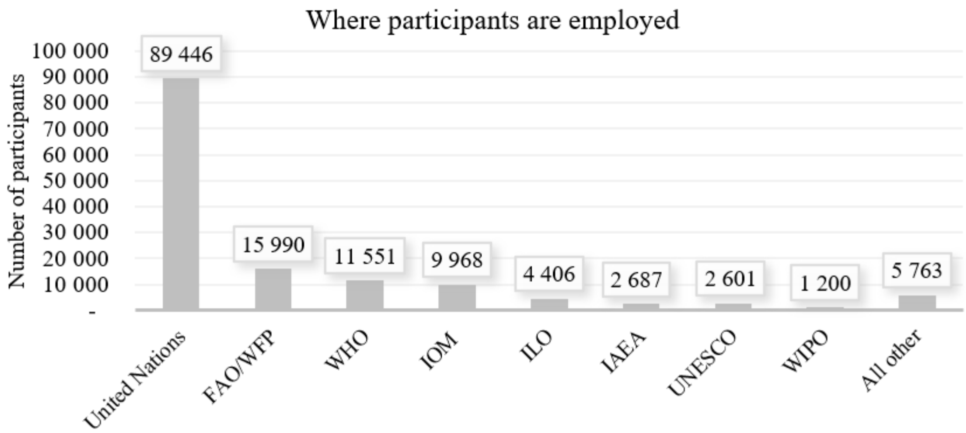
21. Pension benefits for 2022 of $3,128.2 million (2021: $2,975.8 million) reflected an increase of $152.4 million, or 5.1 per cent, compared with the benefits in 2021 (see sect. E, Participants and beneficiaries, for more details).

22. Administrative expenses for 2022 of $83.0 million (2021 on a comparable basis: $99.0 million) reflected a decrease of $16.0 million (16.2 per cent), due primarily to the decrease in liabilities for post-employment benefits.

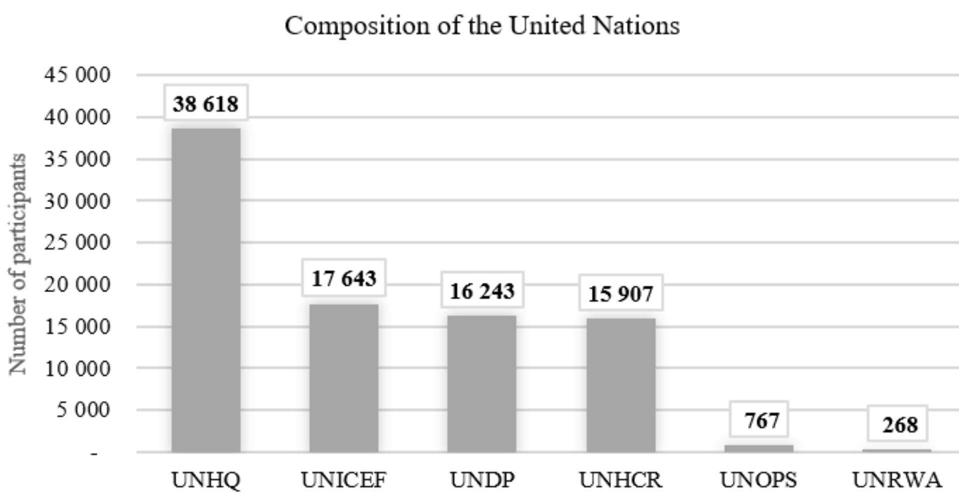
E. Participants and beneficiaries

23. The total number of participants as at 31 December 2022 was 143,612, an increase of 4.6 per cent from 31 December 2021. The total participant count rose by 2.0 per cent during 2021. Most of the increases were in the United Nations (3.0 per cent, from 86,827 to 89,446), the Food and Agriculture Organization of the United Nations, including the World Food Programme (15.0 per cent, from 13,900 to 15,990), and the International Organization for Migration (15.4 per cent, from 8,636 to 9,968).

24. The figures below illustrate the composition of the Fund’s member organizations by participant count and the funds and programmes of the United Nations as at 31 December 2022.

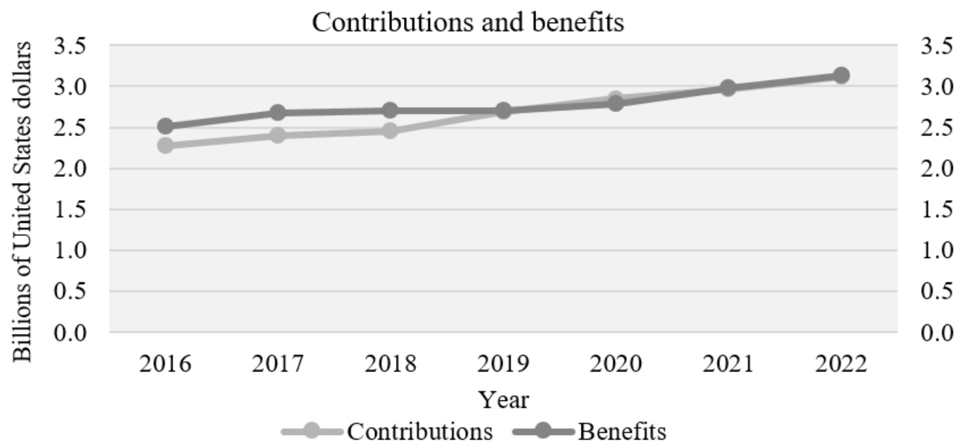


Abbreviations: FAO/WFP, Food and Agriculture Organization of the United Nations/World Food Programme; IAEA, International Atomic Energy Agency; ILO, International Labour Organization; IOM, International Organization for Migration; UNESCO, United Nations Educational, Scientific and Cultural Organization; WHO, World Health Organization; and WIPO, World Intellectual Property Organization.



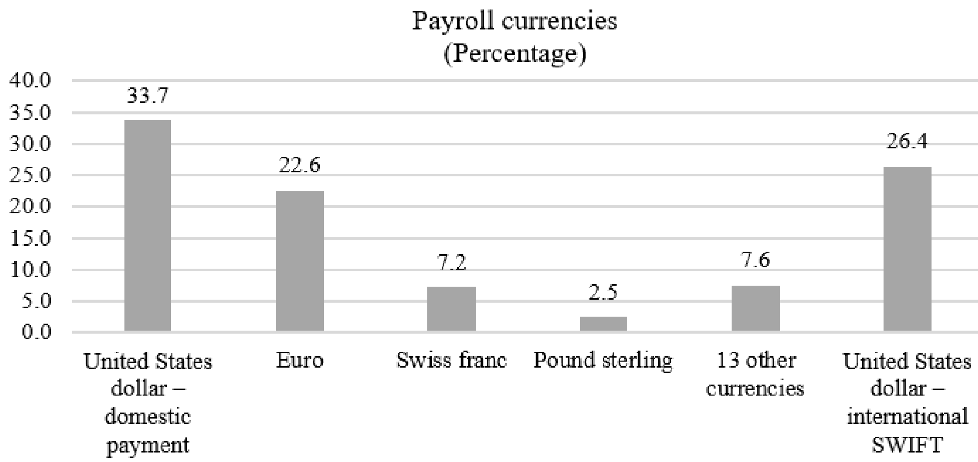
Abbreviations: UNDP, United Nations Development Programme; UNHCR, Office of the United Nations High Commissioner for Refugees; UNHQ, United Nations Headquarters; UNICEF, United Nations Children’s Fund; UNOPS, United Nations Office for Project Services; and UNRWA, United Nations Relief and Works Agency for Palestine Refugees in the Near East.

25. The increase in the number of Fund participants, along with the increase in pensionable remuneration (6.2 per cent for all grades and steps in the Professional and higher categories from 1 February 2021 to 1 February 2022), contributed to the increase in pension contributions for the year 2022 by 5.1 per cent, from $2,969.3 million for the year ended 31 December 2021 to $3,121.3 million for the year ended 31 December 2022. As in the year 2021, the total contributions were exceeded slightly by the total pension benefits of $3,128.2 million during the year 2022. During the year 2021, the total contributions were $2,969.3 million and the total pension benefits were $2,975.8 million.



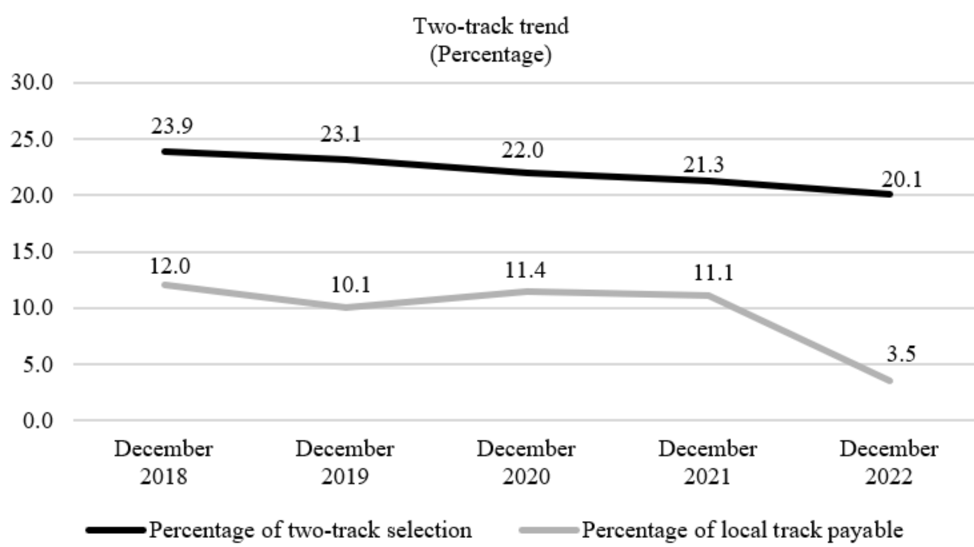
26. The Fund's beneficiaries reside in more than 190 countries. Most recipients of monthly periodic benefits request their benefits to be paid to banks in the country in which the member organization headquarters are located (United States of America, France, Switzerland, Austria, Italy or United Kingdom of Great Britain and Northern Ireland). However, a considerable number of beneficiaries use banks outside those countries. The Fund is fully committed to delivering payments in every jurisdiction of the world. Thus, the distribution of benefit payments is subject to global geopolitical challenges that disrupt banking conditions in affected locations (e.g. Afghanistan, Mali and Russian Federation).

27. The Fund transfers monthly benefit payments in 17 currencies, with more than two thirds paid using domestic payment methods, as shown in the figure below. The Fund continues to identify additional jurisdictions for payments in local currencies through the local banking accounts of member organizations. In 2022, more than 60 per cent of beneficiaries requested that their benefits be paid in United States dollars.



28. Since 2021, inflation has been increasing in the United States and around the world. To preserve the purchasing power of pension benefits, the Fund applies cost-of-living adjustments to its periodic benefits, annually or semi-annually, in the case of extreme inflation. The increase in inflation led to a substantial increase in benefit payments in 2022. Pensions on the United States dollar track were adjusted by 8.6 per cent in April 2022.

29. For beneficiaries residing outside the United States, the Fund offers an optional irrevocable two-track feature whereby their periodic benefit is calculated and maintained in both United States dollars (United States dollar track) and the local currency of the country of residence (local track). As of December 2022, 20 per cent of beneficiaries had opted for the two-track feature. The Fund observed that the vast majority of beneficiaries who had retired in recent years had chosen to receive their benefits on the United States dollar track. The payments to beneficiaries who have opted for the two-track feature are calculated and adjusted in their local currency and according to the consumer price index, but they receive a guaranteed minimum according to the United States dollar track. Owing to the strong dollar and relatively high inflation in the United States, the majority of two-track recipients now receive the guaranteed minimum under the United States dollar track.



F. Investment management

30. The Fund's long-term return objective is to earn the highest possible investment return consistent with the Fund's risk appetite, so as to deliver an investment return that at least meets over the long term (i.e. over 15-year periods and longer) the Fund's assumed real rate of return objective (i.e. the annual percentage return realized on an investment, which is adjusted for changes in prices due to inflation or other external effects), which is currently 3.5 per cent in United States dollars.

31. The investments are carried out within the framework of the Fund's investment policy statement, which is regularly and comprehensively updated following the completion of an asset-liability management study, conducted once every four years. The investment policy statement was last updated in 2022 (see www.unjspf.org/wp-content/uploads/2022/09/Investment-Policy-Statment-September-2022.pdf).

Strategic asset allocation as at 31 December 2022
(Percentage)

Asset class	*Minimum*	*Target*	*Maximum*	*Benchmark weight*	*Portfolio weight*
Global equities	38	53	68	50.94	50.59
Private equity	2	7	12	8.42	8.42
Real estate	2	8	16	9.17	9.17
Real assets[a]	–	1	5	0.47	0.47
Global fixed income	26	29	32	29.00	28.71
Investment, treasury and operational cash	1	2	5	2.00	2.64
Total	**–**	**100**	**–**	**100.00**	**100.00**

[a] Real assets include infrastructure, timberland and commodities.

32. In response to the global coronavirus disease (COVID-19) crisis and in addressing Office of Internal Oversight Services recommendations, the Office of Investment Management conducted an asset management and benchmark study in 2021, hiring an independent consultant to update the asset allocation on the basis of new market conditions and review the appropriateness of benchmarks for different asset classes. The study provides an implementable investment path for two- and five-year scenarios, consistent with the long-term perspective established in the 2019 asset-liability management study. The new public equity benchmark was effective from 1 June 2022. Based on a consultant's recommendation, the new benchmark follows a broader approach, instead of a region-based segmentation approach, by using a global benchmark without a bias towards emerging markets. The new fixed-income benchmark was effective from 1 September 2022 and introduced a corporate bond component, broadening the asset mix to capture a wider range of market opportunities and related returns. The new benchmark is also customized by excluding environmental, social and governance restricted securities.

33. In 2022, the Office of Investment Management continued its environmental, social and governance integration process, resulting in ratings of 4 to 5 stars in the 2021 Principles for Responsible Investing report and being ranked first in the 2021–2022 Responsible Asset Allocator Initiative Index and Leaders List Report (see www.unjspf.org/the-fund/sustainable-investing). The Sustainable Investing team was expanded with three new staff members dedicated to asset classes, and environmental, social and governance certifications were rolled out for investment teams. The Office adopted a new environmental, social and governance policy and developed Climate 2.0 and Equity 2.0 strategies. The Fund is on track to meet its carbon reduction targets by

2025 and is expanding coverage to non-listed real estate and infrastructure. Finally, the Office became a signatory to the financial sector statement at the fifteenth Conference of the Parties to the Convention on Biological Diversity, committing to protecting and restoring biodiversity and ecosystems through financing activities and investments.

34. At the beginning of 2023, there was volatility in the financial markets, in particular in the banking sector. As a result, the Fund has engaged in meetings with various committees to ensure proper governance and oversight. Despite these challenges, the Fund remains in a strong financial position, with its assets' market value estimated on a preliminary basis to be more than $82 billion as at 21 April 2023, which is approximately 5 per cent higher than its value on 31 December 2022. Additional information and weekly fund performance updates are available on the Fund's website (www.unjspf.org/the-fund/historical-fund-performance).

G. Actuarial matters

35. Ensuring the long-term sustainability of the Fund is of primary importance to the Pension Board, the participants, the beneficiaries and wider stakeholders. As with most other defined benefit pension plans, the Fund's solvency is closely monitored through two key studies:

(a) A biennial actuarial valuation, conducted for odd years;

(b) An asset-liability management study, usually carried out every four years.

36. Conducted by the Fund's independent consulting actuary, the actuarial valuation considers the Fund from three different perspectives:

(a) Open group valuation. This assumes that the Fund would be run in perpetuity with a continuous influx of new participants. The key metric from this valuation is the required contribution rate, which is the theoretical contribution rate that maintains a balance between liabilities and assets over the long term. This is the primary measure for the overall health of the Fund and its ability to remain open to existing and new participants. The 2021 actuarial valuation resulted in a required contribution rate of 21.4 per cent of pensionable remuneration, compared with the current actual contribution rate of 23.7 per cent, equating to an actuarial surplus of 2.3 per cent of pensionable remuneration;

(b) Closed group termination basis. This assumes that the Fund is closed immediately. The key metric from this valuation is the funded ratio and provides a view of the Fund's ability to meet its obligations if it were to be closed to all participants. The main purpose of this valuation is to establish any requirement to invoke article 26 of the Regulations and Rules of the Fund. The 2021 valuation resulted in a closed book valuation of $70,874 million in accrued benefit liabilities, compared with an actuarial value of assets of $82,912 million, resulting in a funded ratio of 117 per cent;

(c) Promised benefits. The actuarial present value of accumulated plan benefits does not include future new participants or future contributions from existing participants. It also does not take into account future increases in pensionable remuneration. This valuation is carried out only for the purpose of providing a measure of liabilities for the financial statements under International Accounting Standard 26. For even years, when no actuarial valuation is undertaken, the consulting actuary provides an estimate by rolling forward the liabilities from the previous valuation.

37. All three valuation approaches use demographic assumptions based on the Fund's own experience, which is reviewed biennially. Economic assumptions reflect the future long-term outlook for the Fund's investment returns and other economic metrics, including inflation. Asset values are based on a five-year market averaging method to limit the impact of short-term market fluctuations while still reflecting longer-term trends.

38. The actuarial present value of accumulated plan benefits as at 31 December 2022 and 31 December 2021 is as follows:

(Millions of United States dollars)

	31 December 2022	*31 December 2021*
Actuarial value of vested benefits		
Participants currently receiving benefits	38 368	36 784
Vested terminated participants	1 919	1 810
Active participants	28 938	26 790
Total vested benefits	**69 225**	**65 384**
Non-vested benefits	1 374	1 272
Total actuarial present value of accumulated plan benefits	**70 599**	**66 656**

39. Currently, the Fund is undergoing a new asset-liability management study with an independent adviser. The study incorporates updated capital market assumptions and evaluates several risk scenarios based on different fundamental assumptions. The findings of the new study will be presented to the Pension Board in July 2023.

H. Operating expenses

40. Operating expenses include administrative expenses, investment transaction costs and management fees expenses. Administrative expenses primarily include staff costs, contractual services, rent and general operating expenses. The General Assembly approves the annual budget for administrative expenses endorsed by the Pension Board, as well as the report of the Advisory Committee on Administrative and Budgetary Questions thereon. Transaction costs include explicit costs of trading securities such as broker commissions and transaction taxes. Management fees include fees of external managers and fees for investment in private equity and real estate funds.

41. The operating expenses of the Fund for the years ended 31 December 2022 and 31 December 2021 are as follows:

(Millions of United States dollars)

Operating expenses for the year ended 31 December 2022	*Secretariat of the Pension Board*	*Pension Administration*	*Office of Investment Management*	*Audit*	*Total*
Administrative expenses					
Staff cost	0.5	17.9	15.4	(0.4)	33.4
Contractual services and consultants	0.1	16.4	18.9	–	35.4
General operating expenses	0.3	7.1	4.7	2.1	14.2
Transaction cost and management fees expenses					
Management fees for investment in private equity and real estate funds	–	–	170.7	–	170.7
External managers' management fees	–	–	14.8	–	14.8
Investment transaction cost	–	–	14.8	–	14.8
Total operating expenses	**0.9**	**41.4**	**239.3**	**1.7**	**283.3**
As a percentage of total investments, and cash and cash equivalents	**–**	**–**	**0.306**	**–**	**–**

(Millions of United States dollars)

Operating expenses for the year ended 31 December 2021	*Secretariat of the Pension Board*	*Pension Administration*	*Office of Investment Management*	*Audit*	*Total*
Administrative expenses					
Staff cost	0.7	35.9	20.1	–	56.7
Contractual services and consultants	–	14.1	14.6	–	28.7
General operating expenses	–	8.1	3.7	1.8	13.6
Transaction cost and management fees expenses					
Management fees for investment in private equity and real estate funds	–	–	163.5	–	163.5
External managers' management fees	–	–	16.5	–	16.5
Investment transaction cost	–	–	21.2	–	21.2
Total operating expenses	**0.7**	**58.1**	**239.6**	**1.8**	**300.2**
As a percentage of total investments, and cash and cash equivalents	**–**	**–**	**0.262**	**–**	**–**

42. Please refer to note 16, Administrative expenses, of the financial statements for additional information on the Fund's administration expenses and note 13, Investment income, for additional information about transaction costs and management fees expenses.

43. The statement of comparison of budget and actual amounts on a comparable basis in relation to administrative expenses provides an explanation of differences greater than 5 per cent between the budget and actual amounts in relation to the Fund's administrative expenses. Note 21 of the financial statements provides a reconciliation of actual amounts presented on the same basis as the budget and administrative expenses included in the statement of changes in net assets.

44. Internally and externally managed assets by asset class as at 31 December 2022 and 31 December 2021 were as follows:

(Millions of United States dollars)

As at 31 December 2022	*Internally managed*	*Externally managed*	*Total*
Equities	36 211	3 035	39 246
Fixed income	19 558	4 574	24 132
Real assets	–	7 493	7 493
Alternatives and other investments	–	6 566	6 566
Investments	**55 769**	**21 668**	**77 437**

(Millions of United States dollars)

As at 31 December 2021	*Internally managed*	*Externally managed*	*Total*
Equities	48 071	3 951	52 022
Fixed income	24 742	–	24 742
Real assets	–	6 614	6 614
Alternatives and other investments	–	6 478	6 478
Investments	**72 813**	**17 043**	**89 856**

45. External managers' fees for public market assets as at 31 December 2022 and 31 December 2021 were as follows:

(Millions of United States dollars)

Externally managed public market assets	*As at 31 December 2022*	*Management fees for the year 2022*
Equity	3 035	14.6
Fixed income	4 574	0.2
Total	**7 609**	**14.8**

(Millions of United States dollars)

Externally managed public market assets	*As at 31 December 2021*	*Management fees for the year 2021*
Equity	3 951	16.5
Fixed income	–	–
Total	**3 951**	**16.5**

46. External managers' fees for private market assets as at 31 December 2022 and 31 December 2021 were as follows:

(Millions of United States dollars)

Externally managed private market assets	*As at 31 December 2022*	*Unfunded commitment at of 31 December 2022*	*Management fees for the year 2022*
Real assets	7 493	2 942	87
Alternatives and other investments	6 566	4 560	83
Total	**14 059**	**7 502**	**170**

(Millions of United States dollars)

Externally managed private market assets	*As at 31 December 2021*	*Unfunded commitment at of 31 December 2021*	*Management fees for the year 2021*
Real assets	6 614	2 752	89
Alternatives and other investments	6 478	3 961	74
Total	**13 092**	**6 713**	**163**

I. Latest developments

47. Annual cost-of-living adjustments have been applied to periodic benefits, effective from the April 2023 payroll. Pensions on the United States dollar track have been adjusted by 6.4 per cent, and pensions on the local track of 112 two-track countries were also adjusted in April 2023. Notably, pensions on the local track of Switzerland have been adjusted by 4.2 per cent, marking the first adjustment since April 2008.

Chapter V

Financial statements for the year ended 31 December 2022

United Nations Joint Staff Pension Fund

I. Statement of net assets available for benefits

(Thousands of United States dollars)

	Note	*31 December 2022*	*31 December 2021*
Assets			
Cash and cash equivalents	4	749 749	1 625 122
Investments	5, 6		
Equities		39 246 356	52 022 627
Fixed income		24 131 952	24 741 886
Real assets		7 492 991	6 613 872
Alternatives and other investments		6 566 220	6 477 746
		77 437 519	**89 856 131**
Contributions receivable		70 607	46 800
Accrued income from investments	7	195 264	144 168
Receivable from investments traded	5	75 854	9 627
Withholding tax receivable	8	60 431	64 701
Other assets	9	20 303	22 643
Total assets		**78 609 727**	**91 769 192**
Liabilities			
Benefits payable	10	143 896	154 441
Payable from investments traded	5	418 750	15 767
After-service health insurance and other employee benefit liabilities	11	94 375	119 720
Other accruals and liabilities	12	34 360	19 711
Total liabilities		**691 381**	**309 639**
Net assets available for benefits		**77 918 346**	**91 459 553**

The accompanying notes are an integral part of these financial statements.

United Nations Joint Staff Pension Fund

II. Statement of changes in net assets available for benefits

(Thousands of United States dollars)

	Note	*For the year 2022*	*For the year 2021*
Investment (loss)/income	13		
Net change in fair value of investments		(14 739 883)	8 709 060
Interest income		592 014	582 824
Dividend income		830 219	893 950
Income from unitized real estate funds		85 982	78 015
Less: transaction costs and management fees		(200 338)	(201 233)
Less: withholding tax		(24 560)	(12 701)
Other investment-related expenses, net		(1 264)	(2 744)
		(13 457 830)	**10 047 171**
Pension contributions	14		
From participants		1 040 470	990 272
From member organizations		2 070 460	1 969 606
Other contributions		10 341	9 387
		3 121 271	**2 969 265**
Pension benefits	15		
Withdrawal settlements and full commutation benefits		173 913	204 672
Retirement benefits		2 959 277	2 785 110
Other benefits/adjustments		(4 943)	(14 005)
		3 128 247	**2 975 777**
Income from services provided to the United Nations	2.3	8 304	7 995
Administrative expenses	16	83 040	99 010
Other expenses	17	1 665	1 766
(Decrease)/increase in net assets available for benefits		**(13 541 207)**	**9 947 878**

The accompanying notes are an integral part of these financial statements.

United Nations Joint Staff Pension Fund

III. Cash flow statement

(Thousands of United States dollars)

	Note	*For the year 2022*	*For the year 2021*
Cash flows from investing activities			
Purchase of investments		(41 841 243)	(28 640 783)
Proceeds from sale/redemption of investments		39 857 082	28 398 707
Dividends received from equity investments		804 019	880 167
Interest received from cash and cash equivalents and fixed income investments		548 588	575 541
Income received from unitized real estate funds		84 690	77 734
Other investment-related expenses, net		(3 684)	(2 744)
Transaction costs, management fees and other expenses paid		(200 988)	(203 165)
Withholding taxes reimbursement		12 571	12 409
Net cash (used)/provided by investing activities		**(738 965)**	**1 097 866**
Cash flows from operating activities			
Contribution from member organizations and participants		3 094 327	2 964 729
Benefits payments		(3 133 540)	(2 961 765)
Net transfer (to)/from other plans		(974)	4 756
Administrative expenses paid		(105 837)	(84 464)
Other expenses paid		(1 670)	(1 766)
Services provided to the United Nations		8 304	7 995
Net cash used by operating activities		**(139 390)**	**(70 515)**
Net (decrease)/increase in cash and cash equivalents		**(878 355)**	**1 027 351**
Cash and cash equivalents at the beginning of year	4	1 625 122	591 585
Exchange gains on cash and cash equivalents		2 982	6 186
Cash and cash equivalents at the end of year	**4**	**749 749**	**1 625 122**

The accompanying notes are an integral part of these financial statements.

United Nations Joint Staff Pension Fund

IV. Statement of comparison of budget and actual amounts on a comparable basis in relation to administrative expenses for the year ended 31 December 2022

(Thousands of United States dollars)

	Appropriation 2022[a]	*Actuals on a comparable basis 2022*	*Variance*	*Percentage*
A. Secretariat of the Pension Board				
Posts	610.9	654.1	43.2	7
Other staff costs	47.2	11.1	(36.1)	(76)
Consultants	–	1.8	1.8	–
Travel of representatives	287.2	194.3	(92.9)	(32)
Travel of staff	40.0	36.4	(3.6)	(9)
Contractual services	235.1	59.3	(175.8)	(75)
General operating expenses	155.3	103.2	(52.1)	(34)
Furniture and equipment	–	1.4	1.4	–
Subtotal	**1 375.7**	**1 061.6**	**(314.1)**	**(23)**
B. Pension Administration				
Posts	31 352.6	31 923.1	570.5	2
Other staff costs	4 999.6	3 295.4	(1 704.2)	(34)
Hospitality	3.2	–	(3.2)	(100)
Consultants	323.6	68.3	(255.3)	(79)
Travel of staff	303.0	249.1	(53.9)	(18)
Contractual services[b]	16 912.4	17 972.9	1 060.5	6
General operating expenses	9 809.6	8 718.5	(1 091.1)	(11)
Supplies and materials	42.3	37.8	(4.5)	(11)
Furniture and equipment	561.0	183.2	(377.8)	(67)
Subtotal	**64 307.3**	**62 448.3**	**(1 859.0)**	**(3)**
C. Office of Investment Management				
Posts	22 427.2	20 897.7	(1 529.5)	(7)
Other staff costs	2 934.2	1 978.9	(955.3)	(33)
Hospitality	2.0	0.7	(1.3)	(65)
Consultants	183.6	168.1	(15.5)	(8)
Travel of representatives	88.2	27.8	(60.4)	(68)
Travel of staff	205.2	198.0	(7.2)	(4)
Contractual services	23 422.2	19 539.8	(3 882.4)	(17)
General operating expenses	4 665.7	4 021.7	(644.0)	(14)
Supplies and materials	13.3	21.5	8.2	62
Furniture and equipment	109.8	440.5	330.7	301
Subtotal	**54 051.4**	**47 294.7**	**(6 756.7)**	**(13)**

	Appropriation 2022[a]	*Actuals on a comparable basis 2022*	*Variance*	*Percentage*
D. Audit				
External audit	393.2	393.2	–	–
Internal audit	1 691.5	1 724.0	32.5	2
Subtotal	**2 084.7**	**2 117.2**	**32.5**	**2**
Total administrative expenses	**121 819.1**	**112 921.8**	**(8 897.3)**	**(7)**

Note: The purpose of this statement is to compare budget amounts to actual amounts on a comparable basis, i.e. actual amounts on the same basis as the budget. Given that the Fund's budget is prepared on a modified cash basis and the actual costs on a comparable basis are consequently also shown on a modified cash basis, the total for actual costs on a comparable basis does not agree with the administrative expenses shown in the statement of changes in net assets because that statement is prepared on an accrual basis.

[a] The General Assembly approved the appropriation for 2022 in its resolution 76/246.

[b] Actuals include the expenditure for the United Nations International Computing Centre of $8.5 million.

United Nations Joint Staff Pension Fund

IV. Statement of comparison of budget and actual amounts on a comparable basis in relation to administrative expenses for the year ended 31 December 2022 (continued)

Explanation of significant differences (greater than +/-5 per cent) between budget and actual amounts on a comparable basis

A. Secretariat of the Pension Board

Posts: The overexpenditure relates primarily to higher actual salary costs resulting from higher actual post adjustments and lower-than-budgeted vacancy rates.

Other staff costs: The underexpenditure is due to lower-than-projected requirements for general temporary assistance.

Consultants: The expenditure is for technical consultation for interpretation services for the Pension Board meeting for which resources were provisioned under general operating expenses.

Travel: The underexpenditure relates primarily to a decrease in the number of days of travel requirements for the Federation of Associations of Former International Civil Servants to attend the Pension Board meeting from 10 to 6 days, as well as a reduction in the number of travellers from six to four.

Contractual services: The underexpenditure is attributable to the utilization of internal resources to implement the decisions of the General Assembly on governance, instead of the resources specifically provisioned for it under contractual services.

General operating expenses: The underexpenditure is due to lower-than-anticipated expenditure for conference and catering services for the Pension Board meeting.

Furniture and equipment: The expenditure is for the acquisition of software for interpretation services for the Pension Board meeting for which resources were provisioned under general operating expenses.

B. Pension Administration

Other staff costs: The underexpenditure is attributable to lower-than-projected expenditure for general temporary assistance stemming from difficulties in attracting and recruiting qualified temporary staff.

Hospitality: The underexpenditure is due to the absence of hospitality events in 2022.

Consultants: The underexpenditure is due to the non-utilization of resources provisioned for: (a) conducting process mapping and developing business requirements for system enhancement and continuous improvement projects; (b) undertaking benchmarking studies; and (c) programme management for the strategy deployment framework, as internal resources were utilized instead or postponed to 2023.

Travel: The underexpenditure relates to efforts by the Pension Administration to reduce travel expenditure, whenever feasible, by reducing the number of individuals travelling on official business and consolidating trips, as well as leveraging technology to conduct business meetings.

Contractual services: The overexpenditure is due to the higher-than-budgeted cost of information technology-related projects, including workflow implementation, enhancement and integration of the Integrated Pension Administration System, and migration of application servers to cloud services.

General operating expenses: The underexpenditure relates mainly to: (a) savings in the costs of utility and facility management, as well as lower real estate taxes for the New York Office; (b) savings in rent costs for the Geneva Office owing to the move from the Octagon building to the Palais des Nations buildings; (c) the lower-than-anticipated cost of United Nations administrative services; and (d) the non-utilization of resources for the review of medical board and United Nations Appeals Tribunal cases.

Supplies and materials: The underexpenditure is due to the lower-than-projected requirements for supplies and materials, as staff continued to work remotely for most working days.

Furniture and equipment: The underexpenditure relates to the lower-than-anticipated requirement for the replacement of servers.

C. Office of Investment Management

Posts: The underexpenditure is due primarily to higher-than-budgeted vacancy rates, offset partly by higher actual post adjustments.

Other staff costs: The underexpenditure is attributable to lower-than-projected expenditure for general temporary assistance stemming from difficulties in recruiting qualified temporary staff.

Hospitality: The underexpenditure is due to fewer hospitality events in 2022.

Consultants: The underexpenditure is due to the lower-than-anticipated requirement for consultants for the culture transformation exercise.

Travel: The underexpenditure is due to the cancellation or postponement of planned travel events.

Contractual services: The underexpenditure relates primarily to resources for the data warehouse, target operating model and risk adviser, owing to the timing of the procurement process.

General operating expenses: The underexpenditure relates mainly to lower real estate taxes and savings in the costs of utility and facility management.

Supplies and materials: The overexpenditure relates to the acquisition of a market data licence for which resources were provisioned under contractual services.

Furniture and equipment: The overexpenditure relates to the acquisition of network equipment to upgrade the information technology infrastructure.

United Nations Joint Staff Pension Fund
Notes to the financial statements

Note 1
Description of the plan

1. The following is a brief description of the United Nations Joint Staff Pension Fund. The Regulations and Administrative Rules of the Fund in force are available at the Fund's website (www.unjspf.org).

1.1 General

2. The Fund was established by the General Assembly in 1949 to provide retirement, death, disability and related benefits for staff of the United Nations and the other international organizations admitted to membership in the Fund. The Fund is a multiple-employer defined benefit plan and there were 25 member organizations participating in the Fund as at 31 December 2022. All participating organizations and employees contribute to the Fund on the basis of pensionable remuneration. The contribution rate is a fixed rate of 7.9 per cent for participants and 15.8 per cent for employers (see also note 3.5).

3. The Fund is governed by the United Nations Joint Staff Pension Board made up of: (a) 12 members appointed by the United Nations Staff Pension Committee, 4 of whom are elected by the General Assembly, 4 appointed by the Secretary-General and 4 elected by the participants in service in the United Nations; and (b) 21 members appointed by the staff pension committees of the other member organizations in accordance with the rules of procedure of the Fund, 7 of whom are chosen by the bodies of the member organizations corresponding to the Assembly, 7 appointed by the chief administrative officers of the member organizations and 7 chosen by the participants in service.

1.2 Administration of the Fund

4. The United Nations Joint Staff Pension Board, a subsidiary organ of the General Assembly, has the overall supervisory responsibility for the administration of the Fund and for the observance of the Regulations and Rules of the Fund. The Pension Board appoints an independent Secretary who is responsible for a full range of secretariat conference management and services. The role of the Secretary of the Pension Board is distinct from the roles and responsibilities pertaining to all aspects of the management, administration and investments of the Fund. The Secretary of the Pension Board reports directly to the Pension Board.

5. The Chief Executive of Pension Administration is appointed by the Secretary-General on the recommendation of the Pension Board.

6. The Chief Executive acts under the authority of the Pension Board in the discharge of the latter's responsibility for administrative supervision of the Fund as a whole. This includes responsibility for strategic planning and operational direction; the establishment of policy; the administration of the Fund's operations and certification of benefit payments; risk management; regulatory compliance; the overall supervision of staff; and stakeholder communications. Pension Administration staff, under the authority of the Chief Executive, provide technical support services, prepare background documentation and offer guidance and advice to the Pension Board and its subsidiary bodies, including its Standing Committee and the Committee of Actuaries. The Chief Executive serves as Secretary of the United Nations Staff Pension Committee. The Chief Executive participates in the meetings of the Fifth Committee of the General Assembly, the Advisory Committee on Administrative and Budgetary Questions, the International Civil Service Commission (ICSC) and any other pertinent bodies. In accordance with article 7 (b) of the Fund's Regulations, in the absence of the Chief Executive, the Deputy Chief Executive performs the functions of the Chief Executive.

7. The investment of the assets of the Fund is decided upon by the Secretary-General after consultation with an Investments Committee and in the light of observations and suggestions made from time to time by the Pension Board on the investments policy. The Secretary-General has delegated his authority and responsibility to act on his behalf in all matters involving his fiduciary duties related to the investment of the assets of the Fund to the Representative of the Secretary-General for the investment of the assets of the Fund. The Representative of the Secretary-General arranges for the maintenance of detailed accounts of all investments and other transactions relating to the Fund, which are open to examination by the Pension Board.

8. A range of administrative functions supporting the Pension Board secretariat, the Pension Administration and the Office of Investment Management are provided by the Fund's executive office reporting to the Deputy Chief Executive.

9. The Chief Financial Officer reports to the Chief Executive and to the Representative of the Secretary-General in their respective substantive responsibilities. The Chief Financial Officer is responsible for formulating financial policy for the Fund, for reviewing budgetary, financial and accounting operations of the Fund and for ensuring that an adequate financial control environment of the Fund is in place to protect the Fund's resources and guarantee the quality and reliability of financial reporting. In addition, the Chief Financial Officer is responsible for setting the rules for the collection from the different information systems and areas of the Fund, the financial and accounting data necessary for the preparation of the Fund's financial statements and has full access to such systems and data. The Chief Financial Officer ensures that the financial statements comply with the Regulations and Rules of Fund, the accounting standards adopted by the Fund and the decisions of the Pension Board and the General Assembly. The Chief Financial Officer also certifies the Fund's financial statements.

1.3 Participation in the Fund

10. Members of the staff of each of the 25 member organizations of the Fund become participants in the Fund upon commencing employment under an appointment for six months or longer or upon completion of six months service without an interruption of more than 30 days. As at 31 December 2022, the Fund had contributors (participants) from member organizations and agencies, including the main United Nations Secretariat, the United Nations Children's Fund, the United Nations Development Programme, the Office of the United Nations High Commissioner for Refugees and other funds and programmes, as well as the various specialized agencies such as the Food and Agriculture Organization of the United Nations, the World Health Organization, the International Organization for Migration, the International Labour Organization, the International Atomic Energy Agency and the United Nations Educational, Scientific and Cultural Organization (see annex for a complete list of member organizations). Periodic benefits are currently paid to individuals in some 190 countries.

1.4 Operation of the Fund

11. Participant and beneficiary processing and queries are handled by operations of the Pension Administration, in offices located in New York, Geneva, Nairobi and Bangkok. All the accounting for operations is handled in New York by the centralized Financial Services. The Financial Services of the Pension Administration also manage receipt of monthly contributions from member organizations and the disbursement of the monthly pension payroll.

12. The Representative of the Secretary-General is assisted by the staff of the Office of Investment Management where investments are traded and processed, and investment transactions are reconciled and accounted for.

1.5 Actuarial valuation of the Fund

13. Article 12 of the Regulations of the Fund provides that the Pension Board shall have an actuarial valuation made of the Fund at least once every three years. The Fund performs actuarial valuations every two years and intends to continue to do so in the future. Article 12 further provides that the actuarial report shall state the assumptions on which the calculations are based, describe the methods of valuation used and state the results, as well as the recommendations, if any, for appropriate action. See note 18 for the actuarial situation of the Fund as at 31 December 2022.

1.6 Retirement benefit

14. Any participant who has five years of contributory service receives, upon separation at or after normal retirement age, a retirement benefit payable for the remainder of his or her life. “Normal retirement age” means age 60 for a participant whose service commenced prior to 1 January 1990; age 62 for a participant whose service commenced or recommenced on or after 1 January 1990 and before 1 January 2014; and age 65 for a participant whose service commenced or recommenced on or after 1 January 2014.

15. The standard annual rate of retirement benefit for a participant who enters the Fund on or after 1 January 1983 is the sum of:

(a) 1.5 per cent of final average remuneration multiplied by the first five years of contributory service;

(b) 1.75 per cent of final average remuneration multiplied by the next five years of contributory service;

(c) 2 per cent of final average remuneration multiplied by the next 25 years of contributory service;

(d) The years of contributory service in excess of 35 and performed as from 1 July 1995, by 1 per cent of the final average remuneration, subject to a maximum total accumulation rate of 70 per cent.

16. The standard annual rate of retirement benefit for a participant who entered the Fund prior to 1 January 1983 is 2 per cent of final average remuneration multiplied by contributory service not exceeding 30 years plus 1 per cent of final average remuneration multiplied by such service in excess of 30 years, not exceeding 10 years.

17. The maximum benefit to participants, subject to the terms specified in the Regulations and Rules of the Fund, is the greater of 60 per cent of pensionable remuneration at the date of separation or the maximum benefit that would be payable, at that date, to a participant at the D-2 level (top step for the preceding five years).

18. The retirement benefit shall, however, be payable at the minimum annual rate that is obtained by multiplying the years of the participant’s contributory service, not exceeding 10, by the smaller of $180 (subject to subsequent adjustments in accordance with the movement of the United States of America consumer price index under the pension adjustment system) or one thirtieth of the final average remuneration.

19. The annual rate of the retirement benefit shall nevertheless not be less, when no other benefit is payable on account of the participant, than the smaller of $300 (subject to subsequent adjustments in accordance with the movement of the United States consumer price index under the pension adjustment system) or the final average remuneration of the participant.

20. "Final average remuneration" means the average annual pensionable remuneration of a participant during the 36 completed months of highest pensionable remuneration within the last five years of contributory service.

21. A participant may, except in the case where a minimum benefit is payable and he or she does not waive the rights thereto, elect to receive: (a) if the retirement benefit is $300 per annum or more, a lump sum not greater than the larger of one third of the actuarial equivalent of the retirement benefit (not exceeding the maximum amount payable to a participant then retiring at normal retirement age, with final average remuneration equal to the pensionable remuneration for the top step of the P-5 level) or the amount of the participant's own contributions at retirement, and the participant's retirement benefit is then reduced accordingly; or (b) if the participant's retirement benefit is less than $1,000 per annum, the lump sum actuarial equivalent of the full retirement benefit, including the prospective spouse's benefit, if any, if the participant so elects.

Early retirement

22. An early retirement benefit is payable to a participant whose age on separation is at least 55 (58 for a participant whose participation commenced on or after 1 January 2014) but less than the normal retirement age and who has five years or more of contributory service at separation.

23. The early retirement benefit for a participant whose participation commenced prior to 1 January 2014 is payable at the standard annual rate for a retirement benefit reduced by 6 per cent for each year between retirement date and normal retirement age, except that: (a) if the participant has completed 25 but less than 30 years of contributory service at the date of retirement, the part of the benefit for service before 1 January 1985 is reduced by 2 per cent a year, and the remaining part of the benefit is reduced by 3 per cent a year; or (b) if the participant has completed 30 or more years of contributory service at the date of retirement, the benefit is reduced by 1 per cent a year; provided, however, that the rate in (a) or (b) applies to no more than five years. The methodology of calculation of the early retirement benefits for employees participating on or after 1 January 2014 is detailed in article 29 of the Regulations and Administrative Rules of the Fund.

24. The early retiree may elect to receive a lump sum on the same terms as for a retirement benefit.

Separation from service prior to eligibility for early retirement

25. A deferred retirement benefit is payable to a participant whose age on separation is less than normal retirement age and who has five years or more of contributory service at separation. The deferred retirement benefit is payable at the standard rate for a retirement benefit and commences at normal retirement age. The participant may elect to have the benefit commence at any time once the participant becomes eligible to receive an early retirement benefit from the Fund on the same terms as for an early retirement benefit.

26. A withdrawal settlement is payable to a participant separating from service before normal retirement age or on or after normal retirement age if the participant is not entitled to a future retirement benefit. The participant receives his or her own contributions increased by 10 per cent for each year of contributory service in excess of five years, to a maximum increase of 100 per cent.

1.7 Disability benefit

27. A disability benefit is payable to a participant incapacitated for further service for a period likely to be permanent or of long duration.

28. The disability benefit is payable at the standard or minimum annual rate for a retirement benefit if the participant is at least normal retirement age at the time of disability. If the participant is under normal retirement age, it is payable at the rate of the retirement benefit to which the participant would have been entitled if he or she had remained in service until normal retirement age and his or her final average remuneration had remained unchanged.

29. The annual rate of the benefit shall, notwithstanding the above, not be less, when no other benefit is payable on account of the participant, than the smaller of $500 (subject to subsequent adjustments in accordance with the movement of the United States consumer price index under the pension adjustment system) or the final average remuneration of the participant.

1.8 Survivor's benefit

30. A benefit is payable to a surviving spouse of a participant who was entitled to a retirement, early retirement, deferred retirement or disability benefit at the date of his or her death or who died in service, if he or she was married at the time of separation and remained married at the time of death. Certain limitations on eligibility apply in cases of divorced surviving spouses. The surviving spouse's benefit is, in general, payable at half the amount of the participant's retirement or disability benefit and is subject to certain minimum levels.

1.9 Child benefit

31. A child benefit is payable to each child under the age of 21 of a participant who is entitled to a retirement, early retirement, or disability benefit or who has died in service, while the child remains under 21. The benefit may also be payable in certain circumstances to a child who is over the age of 21, such as when the child is found to have been incapacitated for substantial gainful employment. The child benefit for each child is generally one third of any retirement or disability benefit due to a participant or that would have been due in the case of a participant who died in service, subject to certain minimum amounts and limited in terms of maximum amount. In addition, there are certain total maximum amounts that apply in cases of multiple children of the same participant.

1.10 Other benefits

32. Other benefits include the secondary dependant's benefit and the residual settlement benefit. A full description of these benefits is available in the Regulations and Administrative Rules of the Fund.

1.11 Pension adjustment system

33. The provisions of the Fund's pension adjustment system provide for periodic cost-of-living adjustments in benefits. In addition, for participants who retire in a country whose currency is not the United States dollar, the current pension adjustment system is intended to ensure that, subject to certain minimum and maximum provisions, a periodic benefit never falls below the "real" value of its dollar amount, as determined under the Regulations of the Fund, and preserves its purchasing power as initially established in the currency of the recipient's country of residence. This is achieved by establishing a dollar base amount and a local currency base amount (the two-track system).

34. The real value of a dollar amount is that amount adjusted over time for movements of the United States consumer price index, while the purchasing power of a recipient's benefit, once established in local currency, is preserved by adjusting it to follow movements of the consumer price index in his or her country of residence. An annual cost-of-living adjustment is conducted on 1 April and the adjustment is made if the consumer price index movement is greater than or equal to 2 per cent from the date of the last adjustment to December. If the applicable consumer price index has moved by 10 per cent or more from December to June, a semi-annual adjustment is made on 1 October.

1.12 Funding policy

35. As a condition of participation in the Fund, participants are required to contribute 7.9 per cent of their pensionable remuneration to the plan and earn interest at a rate of 3.25 per cent per year in accordance with article 11 (c) of the Regulations of the Fund. The participants' contributions for the year ended 31 December 2022 and 31 December 2021 were $1,040.5 million and $990.3 million, respectively. The contribution figures do not include interest on the contributions.

36. The member organizations' funding policy is to make contributions on an estimated monthly basis and then to reconcile these estimated amounts in an annual year-end process. The member organizations' contributions are also expressed as a percentage of the participants' pensionable remuneration as defined in article 51 of the Regulations of the Fund. In accordance with the article 25 of the Regulations of the Fund, the member organizations' contribution rate is currently 15.8 per cent and the contributions to the Fund totalled $2,070.5 million and $1,969.6 million during calendar years 2022 and 2021 respectively. When combined with the participants' contributions and expected investment returns, total funding is estimated to be sufficient to provide for all employees' benefits by the time they retire.

37. The assets of the Fund are derived from:

(a) The contributions of the participants;

(b) The contributions of the member organizations;

(c) The yield from the investments of the Fund;

(d) Deficiency payments, if any, under article 26 of the Regulations of the Fund;

(e) Receipts from any other source.

1.13 Plan termination terms

38. Membership in the Fund may be terminated by decision of the General Assembly, upon the affirmative recommendation of the Pension Board, following an application for termination by a member organization or continued default by an organization in its obligations under the Regulations of the Fund.

39. In the event of such termination, a proportionate share of the total assets of the Fund at the date of termination shall be paid to the former member organization for the exclusive benefit of its staff who were participants in the Fund on such date, pursuant to an arrangement mutually agreed between such organization and the Pension Board.

40. The amount of the proportionate share shall be determined by the Pension Board after an actuarial valuation of the assets and liabilities of the Fund.

41. In the event that an actuarial valuation of the Fund shows that its assets may not be sufficient to meet its liabilities under the Regulations, there shall be paid into the Fund by each member organization the sum necessary to make good the deficiency.

42. Each member organization shall contribute to this sum an amount proportionate to the total contributions that each paid under article 25 during the three years preceding the valuation date.

43. The contribution of an organization admitted to membership less than three years prior to the valuation date shall be determined by the Pension Board.

1.14 Changes in funding policy and plan terminations terms during the reporting period

44. There were no changes in the funding policy or plan termination terms during the reporting period.

Note 2 General information

2.1 Basis of presentation

45. In accordance with the Regulations of the Fund, adopted by the General Assembly, and the Administrative Rules of the Fund, including the financial rules, established by the Pension Board and reported to the Assembly and the member organizations, the accompanying financial statements have been prepared on the accrual basis of accounting in accordance with the International Public Sector Accounting Standards (IPSAS) and International Accounting Standard 26, Accounting and reporting by retirement benefit plans. The financial statements of the Fund consist of the following:

(a) A statement of net assets available for benefits;

(b) A statement of changes in net assets available for benefits;

(c) A statement of cash flows;

(d) A statement of comparison of budget and actual amounts on a comparable basis in relation to administrative expenses;

(e) A note disclosing the actuarial present value of defined retirement benefits, distinguishing between vested benefits and non-vested benefits;

(f) Notes to the financial statements, comprising a summary of significant accounting policies and other explanatory notes.

46. The Fund adopted IPSAS as from 1 January 2012. This also specifically included the adoption of International Accounting Standard 26, Accounting and reporting by retirement benefit plans, of the International Financial Reporting Standards. While International Accounting Standard 26 provides accounting guidance, it also offers direction on the presentation of financial statements, given that it requires the presentation of a statement of net assets available for benefits and a statement of changes in net assets available for benefits. Given that the Fund has incorporated the guidance in International Accounting Standard 26 into its financial policies, the presentation of its financial statements is based on this guidance. On a voluntary basis, the Fund has presented cash flow statements on a comparative basis in accordance with IPSAS 2: Cash flow statements. Additional information is presented where required by IPSAS. For example, as required by IPSAS 24: Presentation of budget information in financial statements, the Fund has included in its financial statements a comparison of budget and actual amounts on a comparable basis and a reconciliation between the actual amounts on a comparable basis (see note 21). While it is stated in IPSAS 24 that the actual cost on a comparable basis should be reconciled to the cash flows from operating, investing and financing activities as presented in the cash flow statement, management has decided to reconcile these amounts to the administrative expenses recognized in the statement of changes in net assets. This is due to the fact that the Fund's budget is limited to the administrative expenses incurred in a year.

47. The financial statements are prepared on an annual basis. The financial statements are presented in dollars and all values are rounded to the nearest thousand dollars, except where otherwise indicated.

2.2 Significant standards, interpretations and amendments during the year

48. In August 2018, the IPSAS Board issued IPSAS 41: Financial instruments, which establishes new requirements for classifying, recognizing and measuring financial instruments and replaces those in IPSAS 29 Financial instruments: recognition and measurement. IPSAS 41 is based on International Financial Reporting Standard 9, Financial instruments, developed by the International Accounting Standards Board. The significant changes introduced by IPSAS 41, compared with IPSAS 29, are the application of a single classification and measurement model for financial assets that considers the characteristics of the asset's cash flows and the objective for which the asset is held; the application of a single forward-looking expected credit loss model that is applicable to all financial instruments subject to impairment testing; and the application of an improved hedge accounting model that broadens the hedging arrangements in scope of the guidance. The model develops a strong link between an entity's risk management strategies and the accounting treatment for instruments held as part of the risk management strategy. The standard is effective for annual reporting periods beginning on or after 1 January 2023, with early adoption permitted. Given that the Fund's investments are already measured at fair value, the analysis undertaken by the Fund indicates that the impact of change on measurement of financial instruments is not expected to be material. The Fund expects to finish evaluating the requirements of IPSAS 41 in detail and the impact of the change in disclosure requirements on the Fund's financial statements during the year 2023.

49. In January 2022, the IPSAS Board issued IPSAS 43: Leases, which provides guidance on the recognition, measurement, presentation and disclosure of leases by replacing IPSAS 13: Leases. For lessees, IPSAS 43 introduces a right-of-use model that replaces the risks and rewards incidental to ownership model in IPSAS 13. This standard is effective for annual reporting periods beginning on or after 1 January 2025, with early adoption permitted. The Fund expects to finish evaluating the requirements of IPSAS 43 in detail and the impact of the change in measurement and disclosure requirements on the Fund's financial statements during the year 2024.

50. Other accounting standards and amendments to the existing standards that have been issued by the IPSAS Board are either not expected to have any impact or have an immaterial impact on the Fund's financial statements.

2.3 Other general information

51. The Fund compiles its financial statements with data collected from three main areas. For operational activities (pension contributions and pension benefits), the Fund maintains its own records on the Integrated Pension Administration System. For investment activities, the Fund receives a monthly general ledger feed from the independent record keeper collected and reconciled from source data provided by the Office of Investment Management and fund managers. For administrative expenses, the Fund utilizes United Nations systems (Umoja) to record and compile its administrative expense activity. Umoja provides information on a modified cash basis, which is subsequently restated to a full accrual basis by the Fund. Some of the administrative expenses of the Fund, including costs associated with the administrative tasks of the Staff Pension Committee secretariat performed by the Fund on behalf of the United Nations, are reimbursed by the United Nations under the terms of a cost-sharing arrangement.

Note 3
Significant accounting policies

3.1 Cash and cash equivalents

52. Cash and cash equivalents are held at nominal value and include cash on hand, cash held with external managers and short-term highly liquid time deposits held with financial institutions with maturities of three months or less from the date of acquisition.

3.2 Investments

Classification of investments

53. All investments of the Fund are designated at fair value through surplus and deficit. Consequently, the Fund's investments are carried and reported at fair value on the statement of net assets available for benefits with changes in fair value recognized in the statement of changes in net assets available for benefits. Purchases and sales of securities are recorded on a trade date basis. The designation and classification of the investments are carried out at initial recognition and reassessed at each reporting date.

54. Any transaction costs arising as part of an investment trade designated at fair value are expensed and recognized in the statement of changes in net assets.

55. The Fund classifies its investments into the following categories:

- Equities (including exchange-traded funds, common and preferred stocks, stapled securities and publicly traded real estate investment trusts)
- Fixed income (including government and agencies securities, corporate and municipal/provincial bonds and mortgage/asset-backed securities)
- Real assets (including investments in funds where the underlying assets are real assets such as real estate, infrastructure assets and timberland)
- Alternative and other investments (including investments in private equity funds)

Valuation of financial instruments

56. The Fund uses the established and documented process of its independent record keeper for determining fair values, which is reviewed and validated by the Fund at the reporting date. Fair value is based on quoted market prices where available. If fair market value is not available, appropriate valuation techniques are used.

57. Investments in certain commingled funds, private equity and private real assets investment funds are not quoted in an active market and therefore do not have a readily determinable fair market value. However, the fund managers generally report investments of the funds on a fair value basis. Therefore, the Fund determines fair value using the net asset value information as reported by the investee fund managers in the latest available quarterly capital account statements adjusted by any cash flows not included in the most recent net asset value reported by the investee fund manager. For financial assets and liabilities not designated at fair value through surplus and deficit, the carrying value approximates fair value.

Interest and dividend income

58. Interest income is recognized on a time-proportionate basis. It includes interest income from cash and cash equivalents and fixed income investments.

59. Dividend income is recognized on ex-dividend date when the right to receive payment is established.

Income from real assets and alternative investments

60. Income distributed from unitized funds is treated as income in the period in which they are earned.

Receivable/payable from/to investments traded

61. Amounts due from and to brokers represent receivables for securities sold and payables for securities purchased that have been contracted for but not yet settled or delivered on the date of the statement of net assets available for benefits. These amounts are recognized at the amount expected to be paid or received to settle the balance. Distributions from real assets and alternative fund investments declared but not received prior to year-end are also included under receivables from investments to the extent that the most recently available net asset value of the fund that declares a distribution has recognized the distribution to be made.

62. Impairment of receivables from investments traded is recorded when there is objective evidence that the Fund will not be able to collect all amounts due from the relevant broker. Significant financial difficulties of the broker, probability that the broker will enter bankruptcy or financial reorganization, and default in payments are considered indicators that the receivable from investments traded is impaired.

3.3 Tax status and withholding tax receivables

63. The Fund's portfolio comprises direct investments and indirect investments. Indirect investments are typically through an investment vehicle such as real estate investment trusts, exchange-traded funds, limited liability partnerships or depository receipts. The Fund is exempt from national taxation of Member States in accordance with Article 105 of the Charter of the United Nations and with article II, section 7 (a) of the Convention on the Privileges and Immunities of the United Nations.

64. For direct investments, some Member States grant relief at source for the Fund's investment-related transactions and income from investments, whereas other Member States continue to withhold taxes and reimburse the Fund upon the filing of a claim. In these instances, the Fund, with assistance from the Fund's custodians or tax advisers, files claims to the governmental taxing authorities for refunds on behalf of the Fund. Taxes withheld on direct investments are initially recognized as "withholding tax receivable" in the statement of net assets available for benefits. After initial recognition if there is objective evidence that the taxes are not recoverable, the carrying amount of the asset is reduced through the use of an allowance account. Any amount considered to be unrecoverable is recognized in the statement of changes in net assets available for benefits and is included under "withholding tax expense". At the end of the year, the Fund measures its withholding tax receivable at the amount deemed recoverable. The Fund does not have a confirmation of tax-exempt status in certain Member States. Accordingly, the taxes withheld on direct investments in these jurisdictions are accrued and deemed not recoverable.

65. For indirect investments, the investment vehicle is typically a taxable entity and the Fund is not directly responsible for any tax. Furthermore, the taxes incurred by investment vehicle can seldom be attributed to the Fund other than investment in depository receipts. Taxes attributed to the Fund on indirect investments are recognized in the statement of changes in net assets available for benefits and are included under "withholding tax expense". To the extent that the Fund is subsequently mostly certain that the taxes will be recovered, the amount is recognized as "withholding tax receivable" in the statement of net assets available for benefits.

66. The Fund also incurs costs on account of certain taxes that are based on the value of the transaction. Transaction-based taxes include stamp duty, security transaction

tax and financial transaction tax. Transaction-based taxes are recognized in the statement of changes in net assets available for benefits and are included under "other transaction cost". To the extent that the Fund is subsequently virtually certain that the taxes will be recovered, the amount is recognized as "other receivable" in the statement of net assets available for benefits and "other income" in the statement of net assets available for benefits.

3.4 Critical accounting estimates

67. Management makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities are outlined below.

Fair value of financial instruments

68. The Fund holds financial instruments that are not quoted in active markets. Fair values of such instruments are determined using appropriate valuation techniques. Where valuation techniques are used to determine fair values, they are validated and periodically reviewed and modified as required. Where available, valuation models are calibrated by back testing to actual transactions to ensure that outputs are reliable. The Fund relies primarily on the assurance provided by the investee company's independent auditors.

69. When fair value is based on an observable market price, the quoted price at the reporting date is used. The fair value of an asset determined in accordance with IPSAS 29 reflects a hypothetical exit transaction at the reporting date. Changes in market prices after the reporting date are therefore not reflected in asset valuation.

70. Fair values of financial instruments not quoted in an active market may also be determined by the Fund using reputable pricing sources (such as pricing agencies) or indicative prices from bond/debt market makers. Broker quotes as obtained from the pricing sources may be indicative and not executable or binding. The Fund exercises judgment on the quantity and quality of pricing sources used.

71. Where no market data is available, the Fund may value financial instruments using internal valuation models, which are usually based on valuation methods and techniques generally recognized as standard within the industry. Valuation models are created using observable data to the extent practicable. However, in areas such as credit risk (both the Fund and counterparty), volatilities and correlations may require management to make estimates. Changes in assumptions about these factors could affect the reported fair value of financial instruments.

72. The determination of what constitutes "observable" requires significant judgment by the Fund. The Fund considers observable data to be market data that are readily available, regularly distributed or updated, reliable and verifiable, not proprietary, and provided by independent sources that are actively involved in the relevant market.

73. The valuation of investments in real assets and alternative investments through limited liability partnerships requires significant judgment owing to the absence of quoted market values, the inherent lack of liquidity and the long-term nature of such investments. The valuation of these investments is based on the valuation provided by the general partners or managers of the underlying investments. The Fund relies primarily on these tests performed by the investee company's independent auditors and the individual investment managers' compliance with generally accepted accounting standards and valuation procedures.

Taxes

74. Uncertainties exist with respect to the interpretation of complex tax regulations and changes in tax laws on withholding tax. Given the wide range of international investments, differences arising between the actual income and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax expense already recorded during the year and any tax receivable deemed recoverable at the end of the year.

Impairment

75. The annual review to assess potential impairment is another area where the Fund exercises significant judgment.

Provision for the Fund's non-investment-related receivables

76. A provision is established to reflect the position of the accounts receivable, for all non-performing overpayments of pension benefits that are two years or older as at the respective year-end date of the financial statements.

Actuarial assumptions

77. The Fund uses actuarial methods for the disclosure of employee benefits liabilities. The related assumptions are disclosed in note 11 in respect of after-service health insurance and other employee benefits of the Fund's staff and in note 18, which contains information on assumptions used for the actuarial liability to the beneficiaries of the Fund.

3.5 Contributions

78. Contributions are recorded on an accrual basis. Participants and their employing member organizations are required to contribute 7.9 per cent and 15.8 per cent, respectively, of their pensionable remuneration to the Fund. Each month the Fund accrues a receivable amount for contributions expected. When contributions are actually received, the receivable is offset. Contributions are due to be paid by member organizations by the second business day of the month following the month to which the contributions relate. The contributions vary on the basis of changes in the number of participants, changes in the distribution of participants, changes in pensionable remuneration rates as a result of cost-of-living increases determined by ICSC, and the periodic grade step increase to individual pensionable remuneration received by all participants.

3.6 Benefits

79. Payments of benefits, including withdrawal settlements, are recorded on an accrual basis. The right to a benefit is generally forfeited if, for two years (withdrawal settlement or residual settlement) or five years (retirement, early retirement, deferred retirement or disability benefit) after payment has been due, the beneficiary has failed to submit payment instructions or has failed or refused to accept payment. An estimated benefit liability is recognized for withdrawal settlements with a participation period of less than five years for which the beneficiary has not submitted the payment instruction for 36 months from the time of the obligating event. The estimate is based on the average of the last five-year expense for such cases.

3.7 Accounting for non-United States dollar-denominated currency translations and balances

80. Non-dollar-denominated currency transactions are translated using the spot exchange rate between the functional currency and the non-dollar-denominated currency at the date of the transaction.

81. At each reporting date, non-dollar-denominated monetary items are translated using the closing spot rate. The Fund applies WM/Reuters Company rates (primary source) and Bloomberg and Refinitiv rates (secondary source) as spot rate for the investment activities and the United Nations operational rate of exchange for non-investment activities. Exchange differences arising on the settlement of these monetary items or on the translation of these monetary items at rates different from those at which they were previously translated are recognized in the change in net assets available for benefits in the period in which they arise.

3.8 Leases

82. All the Fund's leases are categorized as operating leases. An operating lease is a lease that does not transfer substantially all the risks and rewards incidental to ownership of an asset. Lease payments under operating leases are recognized as an expense on a straight-line basis over the lease term.

3.9 Property, plant and equipment

83. Property, plant and equipment are stated at historical cost less accumulated depreciation and any impairment losses. All assets acquired for a cost of $20,000 and above are capitalized. The Fund reviews this threshold annually for reasonableness. The Fund does not own land or buildings.

84. Depreciation is provided for property, plant and equipment over their estimated useful lives using the straight-line method. The estimated useful lives for property, plant and equipment classes are as follows:

Class	*Estimated useful life in years*
Computer equipment	4
Office equipment	4
Office furniture	10
Office fixtures and fittings	7
Audiovisual equipment	7

85. Leasehold improvements are recognized as assets and valued at cost and are depreciated over the lesser of seven years or the lease term. Impairment reviews are undertaken if indicators of impairment exist.

3.10 Intangible assets

86. Intangible assets are capitalized if their cost exceeds the threshold of $20,000, except for internally developed software where the threshold is $50,000. The capitalized cost of internally developed software excludes those costs related to research and maintenance. Intangible assets are stated at historical cost less accumulated amortization and any impairment losses. Amortization is recognized over the estimated useful life using the straight-line method. The estimated useful lives for intangible asset classes are as follows:

Class	*Estimated useful life in years*
Software acquired externally	3
Internally developed software	6
Licences and rights, copyrights and other intangible assets	Shorter of 3 years or the life of the asset

3.11 Emergency fund

87. The appropriation is made when the authorization is approved by the General Assembly. Participants wishing to avail themselves of this benefit submit an application to the Fund. After review and authorization, approved amounts are paid to the participant. Payments are charged directly against the appropriation account up to the amount authorized by the Pension Board. Current expense for the year is reported in the statement of changes in net assets available for benefits.

3.12 Provisions and contingent liabilities

88. A provision is recognized for future liabilities and charges if, as a result of a past event, the Fund has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation.

89. Contingent liabilities are disclosed for any possible obligations that arise from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Fund. Contingent liabilities are also disclosed where present obligations that arise from past events cannot be recognized because it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligations, or the amount of the obligations cannot be reliably measured.

3.13 Employee benefits

90. Among certain short-term and other long-term benefits, the Fund provides its employees with certain post-employment benefits.

91. After-service health insurance and repatriation grant are classified as defined benefit schemes and accounted for as such.

92. The employees of the Fund are themselves participating in the Fund. While the Fund is a defined benefit scheme, it has been classified as a multi-employer fund. The plan exposes participating organizations to actuarial risks associated with the current and former employees of other organizations participating in the Fund, with the result that there is no consistent and reliable basis for allocating the obligation, plan assets and costs to individual organizations participating in the plan. The Fund, in line with the other participating organizations in the Fund, is not in a position to identify its share of the underlying financial position and performance of the plan with sufficient reliability for accounting purposes, and hence has treated this plan as if it were a defined contribution plan in line with the requirements of IPSAS 39: Employee benefits. The Fund’s contributions to the plan during the financial period are recognized as expenses in the statement of changes in net assets available for benefits.

3.14 Reconciliation of budget information

93. The Fund’s budget is prepared on a modified cash basis, whereas the financial statements are prepared on an accrual basis.

94. The General Assembly approves the annual budget for the Fund’s administrative expenses. Budgets may be subsequently amended by the Assembly or through the exercise of delegated authority.

95. As required by IPSAS 24, the statement of comparison of budget and actual amounts on a comparable basis in relation to administrative expenses for the year ended 31 December 2022 provides a comparison of budget and actual amounts on a comparable basis. The comparison includes the original budget amounts, the actual amounts on the same basis as the corresponding budgetary amounts and an explanation of material differences (> +/- 5 per cent) between the actual and budget amounts.

96. Note 21 provides a reconciliation of actual amounts presented on the same basis as the budget and administrative expense included in the statement of changes in net assets.

3.15 Related party transactions

97. Parties are considered to be related when one party has the ability to control the other party or exercise significant influence over the other party in making financial and operating decisions or if the related party entity and another entity are subject to common control.

98. The following parties are considered related parties for the Fund in 2022:

(a) Key management personnel: the Chief Executive of Pension Administration, the Representative of the Secretary-General, the Deputy Chief Executive of Pension Administration, the Chief Investment Officer and the Chief Financial Officer (see note 1.2);

(b) The General Assembly;

(c) The 25 member organizations participating in the Fund;

(d) The United Nations International Computing Centre.

99. A summary of the relationship and transactions with the above parties is given in note 23.

3.16 Subsequent events

100. Any information about conditions that existed at the date of the statement of net assets available for benefits that is received after the reporting period but before the financial statements are signed and that is material to the Fund is incorporated in the financial statements.

101. In addition, any event that occurs after the date of the statement of net assets available for benefits but before the financial statements are signed that is material to the Fund are disclosed in the notes to the financial statements.

102. Only the Fund's management has the authority to amend these financial statements.

Note 4
Cash and cash equivalents

103. Cash and cash equivalents include:

(Thousands of United States dollars)

	31 December 2022	*31 December 2021*
Cash at bank – Office of Investment Management	458 049	1 354 959
Cash at bank – Pension Administration	202 464	212 581
Cash held by external managers – Office of Investment Management	89 236	57 582
Total cash and cash equivalents	**749 749**	**1 625 122**

Note 5
Financial instruments by category

104. The tables below provide an overview of all financial instruments held by category as at 31 December 2022 and 31 December 2021:[5]

(Thousands of United States dollars)

	As at 31 December 2022		
	Financial instruments at fair value	*Loans and receivables*	*Other financial liabilities*
Financial assets as indicated in the statement of net assets available for benefits			
Cash and cash equivalents	749 749	–	–
Investments			
Equities	39 246 356	–	–
Fixed income	24 131 952	–	–
Real assets	7 492 991	–	–
Alternative and other investments	6 566 220	–	–
Contributions receivable	–	70 607	–
Accrued income from investments	–	195 264	–
Receivable from investments traded	–	75 854	–
Withholding tax receivables	–	60 431	–
Other assets	–	18 522	–
Total financial assets	**78 187 268**	**420 678**	**–**
Financial liabilities as indicated in the statement of net assets available for benefits			
Benefits payable	–	–	143 896
Payable from investments traded	–	–	418 750
After-service health insurance and other employee benefit liabilities	–	–	94 375
Other accruals and liabilities	–	–	34 360
Total financial liabilities	**–**	**–**	**691 381**

Investments exceeding 5 per cent of net assets

105. There were no investments representing 5 per cent or more of net assets available for benefits as at 31 December 2022.

106. There were no investments representing 5 per cent or more of equities, fixed income or alternatives and other investments as at 31 December 2022. The Fund held a total of $867.4 million in two real estate funds as at 31 December 2022, which represented 5 per cent or more of investments in the real assets category.

[5] Non-financial assets and liabilities other than employee benefits are excluded from the table, given that this analysis is required only for financial instruments.

(Thousands of United States dollars)

	As at 31 December 2021		
	Financial instruments at fair value	*Loans and receivables*	*Other financial liabilities*
Financial assets as indicated in the statement of net assets available for benefits			
Cash and cash equivalents	1 625 122	–	–
Investments			
Equities	52 022 627	–	–
Fixed income	24 741 886	–	–
Real assets	6 613 872	–	–
Alternative and other investments	6 477 746	–	–
Contributions receivable	–	46 800	–
Accrued income from investments	–	144 168	–
Receivable from investments traded	–	9 627	–
Withholding tax receivables	–	64 701	–
Other assets	–	22 265	–
Total financial assets	**91 481 253**	**287 561**	**–**
Financial liabilities as indicated in the statement of net assets available for benefits			
Benefits payable	–	–	154 441
Payable from investments traded	–	–	15 767
After-service health insurance and other employee benefit liabilities	–	–	119 720
Other accruals and liabilities	–	–	19 711
Total financial liabilities	**–**	**–**	**309 639**

Investments exceeding 5 per cent of net assets

107. There were no investments representing 5 per cent or more of net assets available for benefits as at 31 December 2021.

108. There were no investments representing 5 per cent or more of equities, fixed income or alternatives and other investments as at 31 December 2021. The Fund held a total of $847.3 million in two real estate funds as at 31 December 2021, which represented 5 per cent or more of investments in the real assets category.

Note 6
Fair value measurement

109. IPSAS establishes a three-level fair value hierarchy under which financial instruments are categorized on the basis of the significance of inputs to the valuation technique. Level 1 includes those securities where unadjusted quoted prices are available in active markets for identical assets or liabilities. Level 2 includes those securities where inputs other than quoted prices included within level 1 are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices). Level 3 includes those securities where inputs for the asset or liability are not based on observable market data (that is, unobservable inputs). The level in the fair value hierarchy within which the fair value measurement is categorized is

determined on the basis of the lowest level of information that is significant to the fair value measurement. If a fair value measurement of an investment uses observable inputs that require significant adjustment on the basis of unobservable inputs, then that investment is classified as level 3.

110. Assessing the significance of a specific input to the fair value measurement of an investment in its entirety requires judgment, considering factors specific to the investment.

111. The tables below present the fair value hierarchy of the Fund's investments (by asset class) measured at fair value as of 31 December 2022 and 31 December 2021:

(Thousands of United States dollars)

Fair value hierarchy as at 31 December 2022	*Level 1*	*Level 2*	*Level 3*	*Total*
Equities				
Common and preferred stock	38 512 162	–	1 647	38 513 809
Funds – exchange-traded funds	672 026	–	–	672 026
Funds – common stock	8 322	–	157	8 479
Stapled securities	52 042	–	–	52 042
Total equities	**39 244 552**	**–**	**1 804**	**39 246 356**
Fixed income				
Government and agencies securities	–	18 767 582	–	18 767 582
Asset backed securities	–	151 173	–	151 173
Corporate bonds/commercial paper	–	4 561 916	22 789	4 584 705
Municipal/provincial bonds	–	170 485	–	170 485
Commercial mortgage-backed	–	405 252	–	405 252
Funds – corporate bond	–	–	52 755	52 755
Total fixed income	**–**	**24 056 408**	**75 544**	**24 131 952**
Real assets				
Real estate funds	–	224 594	6 905 604	7 130 198
Infrastructure assets	–	–	362 330	362 330
Timberlands	–	–	463	463
Total real assets	**–**	**224 594**	**7 268 397**	**7 492 991**
Alternatives and other investments				
Private equity	–	–	6 566 220	6 566 220
Total alternatives and other investments	**–**	**–**	**6 566 220**	**6 566 220**
Total	**39 244 552**	**24 281 002**	**13 911 965**	**77 437 519**

(Thousands of United States dollars)

Fair value hierarchy as at 31 December 2021	*Level 1*	*Level 2*	*Level 3*	*Total*
Equities				
Common and preferred stock	50 143 927	–	2 448	50 146 375
Funds – exchange-traded funds	1 800 533	–	–	1 800 533
Funds – common stock	13 573	–	601	14 174
Stapled securities	61 545	–	–	61 545
Total equities	**52 019 578**	**–**	**3 049**	**52 022 627**
Fixed income				
Government and agencies securities	–	23 123 799	–	23 123 799
Asset backed securities	–	207 406	–	207 406
Corporate bonds/commercial paper	–	587 638	22 789	610 427
Municipal/provincial bonds	–	38 991	–	38 991
Commercial mortgage-backed	–	705 297	–	705 297
Funds – corporate bond	–	–	55 966	55,966
Total fixed income	**–**	**24 663 131**	**78 755**	**24 741 886**
Real assets				
Real estate funds	–	224 791	6 246 587	6 471 378
Infrastructure assets	–	–	125 518	125 518
Timberlands	–	–	16 976	16 976
Total real assets	**–**	**224 791**	**6 389 081**	**6 613 872**
Alternatives and other investments				
Private equity	–	–	6 477 746	6 477 746
Total alternatives and other investments	**–**	**–**	**6 477 746**	**6 477 746**
Total	**52 019 578**	**24 887 922**	**12 948 631**	**89 856 131**

Equities

112. Common and preferred stocks, exchange-traded funds and stapled securities were classified under level 1 if bid prices were available from institutional vendors.

113. Common stock funds amounting to $0.2 million as at 31 December 2022 (31 December 2021: $0.6 million) were valued using a net asset value approach and hence classified under level 3. Common and preferred stocks amounting to $1.6 million as at 31 December 2022 (31 December 2021: $2.4 million) were either temporarily restricted for trading owing to corporate action or the bid price available from unobservable market data and hence classified under level 3.

Fixed income

114. The vast majority of the fixed income securities prices were not obtained from an active market directly, which would have led to a level 1 classification. Instead, prices were obtained through brokers’ bids, which were indicative quotes and therefore classified as level 2.

115. Corporate bond funds amounting to $52.8 million as at 31 December 2022 (31 December 2021: $56.0 million) and corporate bonds/commercial paper amounting to $22.8 million as at 31 December 2022 (31 December 2021: $22.8 million) were considered to be level 3. Inputs for the value of those investments, while available from third-party sources, were not well-defined, readily observable market data. Consequently, the Fund decided to classify such investments as level 3.

Real assets and alternatives and other investments

116. Real assets amounting to $7,268.4 million as at 31 December 2022 (31 December 2021: $6,389.1 million), net of carried interest of $242.4 million (31 December 2021: $250.1 million), as well as alternative and other investments amounting to $6,566.2 million as at 31 December 2022 (31 December 2021: $6,477.7 million), net of carried interest of $482.03 million (31 December 2021: $502.9 million), were classified under level 3 because they were priced using the net asset value methodology for which the Fund was unable to corroborate or verify using observable market data. In addition, limited options were available to the investors to redeem units, hence making the investments in such funds relatively illiquid.

117. Two real estate funds amounting to $224.6 million (31 December 2021: $224.8 million), which were readily redeemable at net asset value without penalties were classified as level 2 assets representing the net asset value as reported by the fund manager.

118. The table below resents the inter-level transfers for the year ended 31 December 2022:

(Thousands of United States dollars)

	Level 1	*Level 2*	*Level 3*	*Total*
Transfers into				
Fixed income	–	–	–	–
Equities	2 448	–	–	2 448
Real assets	–	–	–	–
Alternatives and other investments	–	–	–	–
Total	**2 448**	**–**	**–**	**2 448**
Transfers out of				
Fixed income	–	–	–	–
Equities	–	–	(2 448)	(2 448)
Real assets	–	–	–	–
Alternative and other investments	–	–	–	–
Total	**–**	**–**	**(2 448)**	**(2 448)**

119. For the year ended 31 December 2022, there was a transfer of one equity income security amounting to $2.4 million out of level 3 and into level 1. The security was classified as level 3 as at 31 December 2021 owing to the restriction on trading consequent upon a corporate action.

120. There were no transfers between levels for the year ended 31 December 2021.

121. The table below presents the movements in level 3 instruments for the year ended 31 December 2022 by class of financial instrument.

(Thousands of United States dollars)

	Equities	*Fixed income*	*Real assets*	*Alternative and other investments*	*Total*
Opening balance	**3 049**	**78 755**	**6 389 081**	**6 477 746**	**12 948 631**
Purchases	3 847	2 811	1 473 732	1 398 864	2 879 254
Sales/return of capital	(387)	–	(674 595)	(996 876)	(1 671 858)
Transfers (out of)/into level 3	(2 448)	–	–	–	(2 448)
Net gains and losses recognized in the statement of changes in net assets available for benefits	(2 257)	(6 022)	80 179	(313 514)	(241 614)
Closing balance	**1 804**	**75 544**	**7 268 397**	**6 566 220**	**13 911 965**
Change in unrealized gains and losses for level 3 assets held at the period end and included in statements of changes in net assets available for benefits	(1 384)	(6 022)	(88 179)	(474 620)	(570 205)

122. The table below presents the movements in level 3 instruments for the year ended 31 December 2021 by class of financial instrument.

(Thousands of United States dollars)

	Equities	*Fixed income*	*Real assets*	*Alternative and other investments*	*Total*
Opening balance	**3 274**	**76 673**	**5 415 648**	**4 641 189**	**10 136 784**
Purchases	2 685	2 995	1 106 708	1 655 736	2 768 124
Sales/return of capital	(4 370)	–	(1 183 996)	(1 495 719)	(2 684 085)
Transfers (out of)/into level 3	–	–	–	–	–
Net gains and losses recognized in the statement of changes in net assets available for benefits	1 460	(913)	1 050 721	1 676 540	2 727 808
Closing balance	**3 049**	**78 755**	**6 389 081**	**6 477 746**	**12 948 631**
Change in unrealized gains and losses for level 3 assets held at the period-end and included in statements of changes in net assets available for benefits	2 591	(913)	706 463	1 524 594	2 232 735

Note 7
Accrued income from investments

123. Accrued income from investments is income earned during the year that has yet to be received as at the date of the statement of net assets available for benefits.

(Thousands of United States dollars)

	31 December 2022	*31 December 2021*
Fixed-income securities, cash and cash equivalents	137 238	94 987
Dividends receivable on equities	39 461	40 856
Real assets and alternative investments	18 565	8 325
Total accrued income from investments	**195 264**	**144 168**

Note 8
Withholding tax receivables

124. Withholding tax receivable as at 31 December 2022 and 31 December 2021 and withholding tax expense for the years ended 31 December 2022 and 31 December 2021 by country are as follows:

(Thousands of United States dollars)

Country	*For the year 2022*			*As at 31 December 2022*			*For the year 2021*			*As at 31 December 2021*		
	Tax withheld	*Tax received*	*Tax expense*	*Tax recoverable*	*Deemed not recoverable*	*Tax receivable*	*Tax withheld*	*Tax received*	*Tax expense*	*Tax recoverable*	*Deemed not recoverable*	*Tax receivable*
Australia	25	–	103	867	(42)	825	384	–	50	903	–	903
Austria	105	–	8	239	–	239	147	–	5	142	–	142
Belgium	705	93	651	1 502	(599)	903	346	127	57	942	–	942
Brazil	287	–	287	307	(307)	–	187	–	187	286	(286)	–
Canada	–	–	13	12	(12)	–	–	–	–	13	–	13
Chile	311	184	109	81	(8)	73	399	429	(44)	55	–	55
China	3 496	–	1 810	22 015	(20 329)	1 686	5 006	220	4 786	20 318	(20 318)	–
Colombia	8	–	48	228	(5)	223	153	1	31	263	–	263
Czechia	236	–	(9)	407	–	407	163	451	3	162	–	162
Denmark	1 111	–	81	2 254	–	2 254	1 151	–	51	1 224	–	1 224
Egypt	3 236	–	2 277	4 728	–	4 728	2 283	–	0	3 769	–	3 769
Finland	–	–	117	1 787	–	1 787	1 469	–	112	1 904	–	1 904
Germany	7 038	–	8 909	25 239	(7 748)	17 491	6 129	7 426	1 668	19 362	–	19 362
Greece	–	–	–	105	(105)	–	–	–	–	112	(112)	–
India	175	–	78	741	–	741	110	–	10	644	–	644
Indonesia	1 889	–	1 889	5 125	(5 125)	–	3 391	–	3 391	3 660	(3 660)	–
Ireland	6	–	9	154	–	154	166	–	9	157	–	157
Japan	–	–	–	3	(3)	–	–	–	4	4	(4)	–
Luxembourg	59	1	1	105	(18)	87	31	–	22	49	(19)	30
Mexico	–	–	–	58	(58)	–	–	–	–	55	(55)	–
Netherlands (Kingdom of the)	1 742	1 114	151	2 740	–	2 740	1 231	689	127	2 263	–	2 263
Norway	–	–	21	179	–	179	–	368	13	200	–	200
Papua New Guinea	–	–	–	17	(17)	–	–	–	–	21	(21)	–
Philippines	394	–	205	1 818	(59)	1 759	630	–	94	1 570	–	1 570
Russian Federation	–	3 760	(3 345)	355	(355)	–	2 925	1 249	1 263	761	(346)	415
Singapore	65	41	(1)	76	–	76	51	56	2	51	–	51
Spain	1 529	800	(9)	1 137	–	1 137	1 204	926	28	399	–	399
Sweden	558	–	68	1 409	(29)	1 380	900	–	20	920	(30)	890
Switzerland	9 595	6 507	10 902	31 066	(10 167)	20 899	8 652	–	486	28 713	–	28 713
Thailand	123	–	123	323	(323)	–	214	–	214	204	(204)	–
Türkiye	–	–	–	106	(106)	–	–	–	81	149	(149)	–
United Kingdom of Great Britain and Northern Ireland	168	71	64	676	(13)	663	339	467	31	636	(6)	630
Total	**32 861**	**12 571**	**24 560**	**105 860**	**(45 429)**	**60 431**	**37 661**	**12 409**	**12 701**	**89 911**	**(25 210)**	**64 701**

125. In Brazil, in some provinces in China and for certain periods in Greece, Luxembourg, Mexico, Papua New Guinea, the Russian Federation, Sweden and Türkiye, there are no formally established reclamation mechanisms in place, and in these cases the Fund, with assistance from the Fund's custodians or the tax advisers, have, to date, been unable to file and/or reclaim the taxes withheld. While these Member States have confirmed the Fund's tax-exempt status, the taxes withheld from direct investments in these countries are accrued and continue to be deemed not recoverable in 2022, unless there is certainty of reclaim in subsequent years. The Fund does not currently have a confirmation of tax-exempt status for Indonesia and Thailand. Accordingly, the taxes withheld on direct investments in Indonesia and Thailand are accrued and deemed not recoverable in 2022. For Belgium, Switzerland and Germany, while, in accordance with accounting policy, tax withheld for more than three years is deemed not recoverable, the Fund's custodian has filed requests for reclaim. Consistent with the Fund's prior experience, refunds are anticipated despite delays due to the ongoing coronavirus disease (COVID-19) pandemic.

126. An ageing analysis of withholding tax receivable as at 31 December 2022 and 31 December 2021 is presented as follows:

(Thousands of United States dollars)

	As at 31 December 2022			*As at 31 December 2021*		
Country	*3 years or more*	*Less than 3 years*	*Tax receivable*	*3 years or more*	*Less than 3 years*	*Tax receivable*
Australia	–	825	825	–	903	903
Austria	–	239	239	–	142	142
Belgium	–	903	903	–	942	942
Canada	–	–	–	–	13	13
Chile	–	73	73	–	55	55
China	301	1 385	1 686	–	–	–
Colombia	–	223	223	–	263	263
Czechia	–	407	407	–	162	162
Denmark	–	2 254	2 254	–	1 224	1 224
Egypt	–	4 728	4 728	–	3 769	3 769
Finland	–	1 787	1 787	–	1 904	1 904
Germany	–	17 491	17 491	8 257	11 105	19 362
India	–	741	741	–	644	644
Ireland	–	154	154	–	157	157
Luxembourg	–	87	87	–	30	30
Netherlands (Kingdom of the)	21	2 719	2 740	16	2 247	2 263
Norway	–	179	179	–	200	200
Philippines	–	1 759	1 759	–	1 570	1 570
Russian Federation	–	–	–	–	415	415
Singapore	–	76	76	–	51	51
Spain	–	1 137	1 137	–	399	399
Sweden	–	1 380	1 380	–	890	890

	As at 31 December 2022			*As at 31 December 2021*		
Country	*3 years or more*	*Less than 3 years*	*Tax receivable*	*3 years or more*	*Less than 3 years*	*Tax receivable*
Switzerland	–	20 899	20 899	–	28 713	28 713
United Kingdom of Great Britain and Northern Ireland	–	663	663	–	630	630
Total	**322**	**60 109**	**60 431**	**8 273**	**56 428**	**64 701**

Note 9
Other assets

127. The other assets included in the statement of net assets available for benefits are broken down as follows:

(Thousands of United States dollars)

	31 December 2022	*31 December 2021*
Prepayments and benefits receivable	18 349	21 451
Property, plant and equipment	1 322	106
Intangible assets in use	459	–
Intangible assets under development	–	272
Other receivables	173	814
Total	**20 303**	**22 643**

9.1 Prepayments and benefits receivables

128. An overview of the prepayments and other accounts receivable held by the Fund is presented as follows:

(Thousands of United States dollars)

	31 December 2022	*31 December 2021*
Prepayments	9 215	10 766
Advance benefit payments due to payroll conversion	4 006	4 786
Benefits receivable	10 598	11 214
Benefits receivable – provision	(5 470)	(5 315)
Total	**18 349**	**21 451**

9.2 Property, plant and equipment

129. An overview of the fixed assets held by the Fund is as follows:

(Thousands of United States dollars)

	Information technology equipment	*Leasehold improvements*		
	In use	*In use*	*Under construction*	*Total*
Cost				
1 January 2022	770	15 944	106	16 820
Additions	45	1 503	(106)	1 442
Disposals/transfers	(108)	–	–	(108)
31 December 2022	707	17 447	–	18 154
Accumulated depreciation				
1 January 2022	770	15 944	–	16 714
Depreciation	11	215	–	226
Disposals/transfers	(108)	–	–	(108)
31 December 2022	673	16 159	–	16 832
Net book value, 31 December 2022	**34**	**1 288**	**–**	**1 322**

(Thousands of United States dollars)

	Information technology equipment	*Leasehold improvements*		
	In use	*In use*	*Under construction*	*Total*
Cost				
1 January 2021	1 354	18 624	–	19 978
Additions	–	–	106	106
Disposals/transfers	(584)	(2 680)	–	(3 264)
31 December 2021	770	15 944	106	16 820
Accumulated depreciation				
1 January 2021	1 354	18 624	–	19 978
Depreciation	–	–	–	–
Disposals/transfers	(584)	(2 680)	–	(3 264)
31 December 2021	770	15 944	–	16 714
Net book value, 31 December 2021	**–**	**–**	**106**	**106**

130. The leasehold improvements in use and under construction included above relate to the Fund’s improvements to its offices at New York.

9.3 Intangible assets

131. An overview of the intangible assets held by the Fund is presented as follows:

(Thousands of United States dollars)

	Intangible assets in use	*Under construction*	*Total*
Cost			
1 January 2022	20 336	272	20 608
Additions	551	(272)	279
Transfers	–	–	–
Disposals	–	–	–
31 December 2022	20 887	–	20 887
Accumulated amortization			
1 January 2022	20 336	–	20 336
Amortization	92	–	92
Disposals	–	–	–
31 December 2022	20 428	–	20 428
Net book value, 31 December 2022	**459**	**–**	**459**

(Thousands of United States dollars)

	Intangible assets in use	*Under construction*	*Total*
Cost			
1 January 2021	20 336	–	20 336
Additions	–	272	272
Transfers	–	–	–
Disposals	–	–	–
31 December 2021	20 336	272	20 608
Accumulated amortization			
1 January 2021	20 336	–	20 336
Amortization	–	–	–
Disposals	–	–	–
31 December 2021	20 336	–	20 336
Net book value, 31 December 2021	**–**	**272**	**272**

Note 10
Benefits payable

132. The amount shown in the statement of net assets is broken down as follows:

(Thousands of United States dollars)

	31 December 2022	*31 December 2021*
Withdrawal settlements	75 347	95 781
Lump sum payments	27 492	19 065
Periodic benefits payable	40 293	38 283
Other benefits payable/adjustments	764	1 312
Total	**143 896**	**154 441**

Note 11
After-service health insurance and other employee benefits

133. A breakdown of the after-service health insurance and other employee benefits payable amount shown in the statement of net assets is as follows:

(Thousands of United States dollars)

	31 December 2022	*31 December 2021*
After-service health insurance liability	83 598	106 946
Annual leave	5 478	6 630
Repatriation grant and related costs	4 395	5 324
Education grant and related costs	482	437
Home leave	422	383
Total	**94 375**	**119 720**

134. The Fund does not set aside or ring-fence funding for after-service health insurance and other employee benefit liabilities. These liabilities are recognized in the financial statements at their full amount and deducted in the computation of net assets available for benefits.

After-service health insurance, annual leave and repatriation grants liability

135. The Fund provides its employees, who have met certain eligibility requirements, with the following after-service and end-of-service benefits:

- Health-care benefits after they retire. This benefit is referred to as after-service health insurance.
- Repatriation benefits to facilitate the relocation of expatriate staff members.
- Annual leave benefits to provide staff members with periods of time off from work at full pay for personal reasons and for purposes of health, rest and recreation. Upon separation from service, staff members who have accrued unused annual leave will be paid for each day of unused leave up to a maximum of 60 days.

136. The liabilities as at 31 December 2022 were the result of the roll-forward to 31 December 2022 of the end-of-service benefit obligations as at 31 December 2021 for the Fund by the consulting actuary and:

- Health insurance premium and contribution data provided by the United Nations
- Actual retiree claims experience under health insurance plans
- Estimated travel and shipment costs and annual leave balances reported by the United Nations in the census data
- Various economic, demographic and other actuarial assumptions
- Generally accepted actuarial methods and procedures

137. In performing the roll-forward to 31 December 2022, only the financial assumptions such as the discount rates, inflation and health-care cost trend rates were reviewed as at 31 December 2022 and updated when necessary. All other assumptions remain the same as those used for the full valuation as at 31 December 2021.

138. The key assumptions in the calculation of after-service liabilities are the discount rate and health-care trend rates. The discount rate is based on the "spot" rate that reflects the market expectations at the time of the calculations to meet future expected benefit payments, based on high-quality bonds. The discount rate is then the equivalent single rate that would produce the same liability as the full spot curve using the multiple bonds necessary to meet the future cash flow expectations.

139. The yield curves used in the calculation of the discount rates in respect of the dollar, the euro and the Swiss franc are those developed by Aon Hewitt, consistent with the decision of the Task Force on Accounting Standards to harmonize actuarial assumptions across the United Nations system.

140. For 31 December 2022, the single equivalent discount rates were selected and determined by the Fund, as follows:

- 4.80 per cent for the after-service health insurance scheme
- 5.09 per cent for repatriation benefits
- 5.12 per cent for annual leave

141. For 31 December 2021, the single equivalent discount rates were selected and determined by the Fund, as follows:

- 2.76 per cent for the after-service health insurance scheme
- 2.68 per cent for repatriation benefits
- 2.76 per cent for annual leave

142. The changes in discount rates are driven by the discount curve, which is calculated on the basis of corporate bonds. The bond markets varied over the reporting period, and volatility has an impact on the discount rate assumption. Should the assumption vary by 0.5 per cent, its impact on the obligations would be as follows:

Discount rate	*After-service health insurance*	*Repatriation benefit*	*Annual leave*
Increase of 0.5 per cent	9 per cent decrease	4 per cent decrease	4 per cent decrease
Decrease of 0.5 per cent	10 per cent increase	4 per cent increase	4 per cent increase

143. The comparison of health-care cost trend rates is as follows:

	31 December 2022	*31 December 2021*
United States non-Medicare	6.50 per cent trending down to 3.85 per cent after 9 years	5.17 per cent trending down to 3.95 per cent after 10 years
United States Medicare	6.50 per cent trending down to 3.85 per cent after 9 years	5.03 per cent trending down to 3.95 per cent after 10 years
United States dental	6.50 per cent trending down to 3.85 per cent after 9 years	4.53 per cent trending down to 3.95 per cent after 10 years
Non-United States – Switzerland	4.25 per cent trending down to 2.55 per cent after 6 years	3.44 per cent trending down to 2.25 per cent after 7 years
Non-United States – eurozone	5.20 per cent trending down to 4.15 per cent after 11 years	3.75 per cent and no change

144. For comparison purposes, the table below shows the changes in the obligations resulting from a 0.5 per cent change in the assumed medical cost trend rate:

(Thousands of United States dollars)

2022	*Increase*	*Decrease*
Effect on the defined-benefit obligation	9 320	(8 070)
Effect on the aggregate of the current service cost and the interest rate	1 019	(866)

2021	*Increase*	*Decrease*
Effect on the defined-benefit obligation	12 679	(10 984)
Effect on the aggregate of the current service cost and the interest rate	1 078	(3 130)

145. The decrease in the total after-service health insurance liabilities reported from 31 December 2021 to 31 December 2022 is due primarily to the impact of changing the financial assumptions, in particular the increase in the discount rates for benefits denominated in dollars.

146. The table below illustrates the movements in post-employment net defined-benefit liabilities:

(Thousands of United States dollars)

	2022			*2021*		
	After-service health insurance	*Repatriation grant*	*Annual leave*	*After-service health insurance*	*Repatriation grant*	*Annual leave*
Net defined-benefit liability as at 1 January	**106 946**	**5 324**	**6 630**	**105 186**	**5 493**	**4 882**
Current service cost	6 575	313	483	4 444	328	399
Interest cost	2 938	136	175	2 550	111	105
Benefits paid	(1 307)	(480)	(611)	(1 300)	(347)	(386)
Actuarial (gains)/losses	(31 554)	(898)	(1 199)	(3 934)	(261)	1 630
Net defined-benefit liability as at 31 December	**83 598**	**4 395**	**5 478**	**106 946**	**5 324**	**6 630**

147. The table below illustrates the estimated benefit payments net of participant contributions for the next 10 years.

(Thousands of United States dollars)

	2023	*2024*	*2025*	*2026*	*2027*	*2028–2032*
After-service health insurance	1 496	1 678	1 858	2 030	2 223	14 246
Repatriation grant	479	396	370	351	398	1 505
Annual leave	559	459	409	408	410	1 821

148. The estimated durations of after-service health insurance, repatriation grant and annual leave liabilities were 20, 8 and 9 years, respectively, as at 31 December 2022.

149. Other specific data and key assumptions used in the calculations on the basis of census data as at 31 October 2021are outlined below.

After-service health insurance

150. A total of 273 active staff were included in the calculation: 234 United States-based and 36 non-United States-based. A total of 102 retired staff or their surviving spouses were included in the calculation: 79 United States-based and 20 non-United States=based. In addition, three active staff and three retirees or their surviving spouses that participated in dental-only plans were included. For active staff, the average age was 48 years with 10 years of service. The average age of retirees was 70 years.

Repatriation benefits

151. Staff members who are appointed as international staff are eligible for the payment of a repatriation grant after one year of active service outside his or her country of nationality, as long as the reason for separation is not summary dismissal or abandonment of post.

152. The amount ranges from 2 to 28 weeks of salary depending on the category of employment and years of service of the eligible staff. Travel and shipment of personal effects may also be authorized to the recognized country of home leave.

153. A total of 114 eligible staff with an average annual salary of $85,872 were considered.

Annual leave

154. Staff are entitled to accrue annual leave from the date of their appointment. Staff members who, upon separation from service, have accrued leave will be paid up to a maximum of 60 days if on a fixed-term appointment or up to 18 days on a temporary appointment. Payment amount is calculated at 1/261 of applicable salary amounts for each unused day of annual leave.

155. A total of 345 active staff with an average annual salary of $106,380 were considered.

Note 12
Other accruals and liabilities

156. The amount shown as other accruals and liabilities in the financial statements is broken down as follows:

(Thousands of United States dollars)

	31 December 2022	*31 December 2021*
Accruals for management fees and expenses	20 261	7 115
Accrual for contractual services	159	49
Restoration payable	3 266	3 686
Operating leases accrual	6 094	6 274
United Nations payable	4 249	2 192
Audit fee accrual	197	197
Other	134	198
Total	**34 360**	**19 711**

Note 13
Investment income

157. The table below presents a summary of the Fund's income from investments net of transaction costs recognized during the period. Any transaction cost that can be allocated to a single transaction or trade is netted off against investment income. Examples are broker commissions, other transaction costs and management fees. Any management expense charged to the income statement of a real asset or alternative fund was recorded separately as management expenses in the Fund's statement of changes in net assets and included under transaction costs.

158. In some jurisdictions, the Fund receives dividend income, interest income and real estate income without any withholding tax. This is primarily a result of the fact that pension funds are exempt from withholding taxes in many jurisdictions. However, a number of jurisdictions do not provide this benefit to all pension funds but recognize that the Fund is part of the United Nations and hence exempt from national taxation of Member States on its direct investments in accordance with Article 105 of the Charter of the United Nations and with article II, section 7 (a), of the 1946 Convention on the Privileges and Immunities of the United Nations (see also note 3.3). The Fund is not able to reliably measure the value of the additional tax exemption obtained by being part of the United Nations and therefore does not disclose the value of this additional benefit on the face of the statement of changes in net assets available for benefits as non-exchange income in accordance with IPSAS 23: Revenue from non-exchange transactions.

(Thousands of United States dollars)

	2022	*2021*
Total change in fair value for financial assets designated at fair value	**(14 739 883)**	**8 709 060**
Interest income		
Interest income on cash and cash equivalents	8 447	–
Interest income on fixed income instruments	583 567	582 824
Total interest income	**592 014**	**582 824**
Total dividend income	**830 219**	**893 950**
Total income from unitized real estate funds	**85 982**	**78 015**

	2022	*2021*
Transaction costs		
Real assets and alternative investments management fees	(170 752)	(163 486)
External managers' management fees	(14 803)	(16 466)
Brokerage commissions	(11 285)	(12 880)
Other transactions costs	(3 498)	(8 401)
Total transaction cost	**(200 338)**	**(201 233)**
Withholding tax	**(24 560)**	**(12 701)**
Other investment-related (expenses)/income, net	**(1 264)**	**(2 744)**
Net investment (loss)/income	**(13 457 830)**	**10 047 171**

159. The tables below present the change in the fair value of investments by asset class as a result of changes in market price and currency exchange rate for the years ended 31 December 2022 and 31 December 2021.

(Thousands of United States dollars)

	2022			*2021*		
	Market price	*Currency*[a]	*Total change*	*Market price*	*Currency*[a]	*Total change*
Equities	(10 697 469)	(860 099)	(11 557 568)	7 729 315	(695 609)	7 033 706
Fixed income	(2 986 009)	(111 672)	(3 097 681)	(1 025 500)	(199 286)	(1 224 786)
Real assets investments	230 378	(67 868)	162 510	1 197 848	(48 326)	1 149 522
Alternative investments	(204 432)	(30 093)	(234 525)	1 776 365	(25 928)	1 750 437
Cash, cash equivalents and receivable and payable from investment traded	–	(12 619)	(12 619)	–	181	181
Total change in fair value for financial assets designated at fair value	**(13 657 532)**	**(1 082 351)**	**(14 739 883)**	**9 678 028**	**(968 968)**	**8 709 060**

[a] Change in currency exchange (loss)/gain includes a realized currency exchange loss of $482.0 million (2021: loss of $71.2 million) and an unrealized currency exchange loss of $600.3 million (2021: loss of $897.7 million).

Note 14
Pension contributions

160. Pension contributions received during the period are broken down as follows:

(Thousands of United States dollars)

	2022	*2021*
Contribution from participants		
Regular contributions	1 034 508	984 174
Contributions for validation	722	629
Contributions for restoration	5 240	5 469
	1 040 470	**990 272**
Contributions from member organizations		
Regular contributions	2 069 016	1 968 348
Contributions for validation	1 444	1 258
	2 070 460	**1 969 606**
Other contributions		
Contributions for participants transferred in under agreements	3 137	8 101
Receipts of excess actuarial value over regular contributions	596	319
Other contributions/adjustments	6 608	967
	10 341	**9 387**
Total contributions for the period	**3 121 271**	**2 969 265**

161. The contributions received vary on the basis of changes in the number of participants, changes in the distribution of participants, changes in pensionable remuneration rates as a result of cost-of-living increases determined by ICSC, and the periodic step increase to individual pensionable remuneration received by all participants.

Note 15
Pension benefits

162. Pension benefits during the period are broken down as follows:

(Thousands of United States dollars)

	2022	*2021*
Withdrawal settlements and full commutation of benefits		
For contributory services of 5 years or less	50 188	51 780
For contributory services more than 5 years	123 725	152 892
	173 913	**204 672**
Retirement benefits		
Full retirement benefits	1 574 112	1 460 664
Early retirement benefits	806 338	778 423
Deferred retirement benefits	127 773	119 081
Disability benefits	107 139	101 386
Survivor benefits	304 932	290 783
Child benefits	38 983	34 773
	2 959 277	**2 785 110**

	2022	*2021*
Other benefits/adjustments		
Payments for participants transferred out under agreements	4 110	3 345
Forfeitures	(5 975)	(14 144)
Other benefits/adjustments	(3 078)	(3 206)
	(4 943)	**(14 005)**
Total pension benefits for the period	**3 128 247**	**2 975 777**

Note 16
Administrative expenses

163. Administrative expenses in 2022 are as follows:

(Thousands of United States dollars)

	2022				
	Secretariat of the Pension Board	*Pension Administration*	*Office of Investment Management*	*Audit*	*Total*
Established posts (excluding change in the value of the after-service health insurance liability)	640	30 521	20 334	–	51 495
Changes in the value of the after-service health insurance liability	(164)	(15 923)	(6 841)	(420)	(23 348)
Other staff costs	11	3 295	1 978	–	5 284
Hospitality	–	–	1	–	1
Consultants	2	68	–	–	70
Travel	231	243	223	–	697
Contractual services	56	16 372	18 935	–	35 363
General operating expenses	102	6 579	3 979	–	10 660
Supplies and materials	–	19	18	–	37
Furniture and equipment	–	214	485	–	699
Audit costs (excluding change in the value of the after-service health insurance liability)	–	–	–	2 082	2 082
Total administrative expense	**878**	**41 388**	**39 112**	**1 662**	**83 040**

(Thousands of United States dollars)

	2021				
	Secretariat of the Pension Board	*Pension Administration*	*Office of Investment Management*	*Audit*	*Total*
Established posts (excluding change in the value of the after-service health insurance liability)	598	28 728	17 301	–	46 627
Changes in the value of the after-service health insurance liability	12	1 200	516	32	1 760
Other staff costs	69	5 949	2 258	–	8 276
Consultants	–	59	375	–	434

	2021				
	Secretariat of the Pension Board	*Pension Administration*	*Office of Investment Management*	*Audit*	*Total*
Travel	–	44	33	–	77
Contractual services	–	14 097	14 211	–	28 308
General operating expenses	13	8 018	3 396	–	11 427
Supplies and materials	–	52	17	–	69
Furniture and equipment	–	–	243	–	243
Audit costs (excluding change in the value of the after-service health insurance liability)	–	–	–	1 789	1 789
Total administrative expense	**692**	**58 147**	**38 350**	**1 821**	**99 010**

Note 17
Other expenses

164. Other expenses during the period are as follows:

(Thousands of United States dollars)

	2022	*2021*
Emergency fund expense	29	52
Provision for unrecoverable overpayments of benefits	1 636	1 714
Total other expenses	**1 665**	**1 766**

Note 18
Actuarial situation of the Fund
(see also note 1.5)

165. The Fund provides retirement, death, disability and related benefits for staff of the United Nations and other organizations admitted to membership in the Fund. Accumulated (promised) plan benefits represent the total actuarial present value of those estimated future benefits that are attributable under the Fund's provisions to the service staff have rendered as at the valuation date. Accumulated plan benefits include benefits to be paid to: (a) retired or terminated staff or their beneficiaries; (b) beneficiaries of staff who have died; and (c) present staff or their beneficiaries.

166. Benefits payable under all circumstances – retirement, death, disability and termination of employment – are included to the extent that they are deemed attributable to service staff that have rendered as at the valuation date.

167. The actuarial present value of accumulated (promised) plan benefits (which does not take into account future increases in pensionable remuneration) is determined by independent actuaries and the amount is derived by applying actuarial assumptions to adjust the accumulated plan benefits to reflect the time value of money (through discounts for interest) and the probability of payment (by means of decrements such as for death, disability, withdrawal or retirement) between the valuation date and the expected date of payment.

168. The Fund is applying the guidance included in International Accounting Standard 26.28 (b) and discloses the actuarial present value of promised retirement benefits in the notes to its financial statements.

Key assumptions

169. The liabilities as at 31 December 2022 were the result of the roll-forward to 31 December 2022 of the actuarial present value of accumulated plan benefits as at 31 December 2021 for the Fund by the consulting actuary. The significant actuarial assumptions used are the same as those used in the valuation as at 31 December 2021:

- Life expectancy of participants (2017 United Nations mortality tables adjusted for forecast improvements in mortality)
- Age-specific retirement and turnover assumptions
- Additional assumptions regarding percentage of benefit commuted and percentage of participants who are married, among others
- Annual investment return of 6.0 per cent, which serves as the discount rate for liabilities
- Annual rate of 2.5 per cent for cost-of-living increases in pensions

170. These key assumptions were recommended by the Committee of Actuaries and adopted by the Pension Board at its sixty-ninth session, in July 2021. The foregoing actuarial assumptions are based on the presumption that the Fund will continue. Were the Fund to be terminated, different actuarial assumptions and other factors may be applicable in determining the actuarial present value of accumulated plan benefits.

Statement of accumulated benefits

171. The actuarial present value of accumulated plan benefits as at 31 December 2022 is as follows (see note 1.11 for a description of the pension adjustment system):

(Thousands of United States dollars)

	If future pension payments are made under the Regulations:	
	Without pension adjustments	*With pension adjustments*
Actuarial value of vested benefits		
Participants currently receiving benefits	28 670 044	38 368 048
Vested terminated participants	1 130 009	1 918 372
Active participants	20 869 906	28 938 291
Total vested benefits	**50 669 959**	**69 224 711**
Non-vested benefits	1 076 231	1 374 073
Total actuarial present value of accumulated plan benefits	**51 746 190**	**70 598 784**

Information on participation in the Fund

172. The last valuation was provided by the consulting actuaries as at 31 December 2021, on the basis of the participation shown below:

	At as 31 December 2021
Active participants accruing benefits	
Number	128 051
Annual remuneration (thousands of United States dollars)	12 774 734
Average remuneration (United States dollars)	**99 763**
Inactive participants no longer accruing benefits	
Number	9 210
Annual benefits payable at normal retirement age (thousands of United States dollars)	91 370
Average benefit payable at normal retirement age (United States dollars)	**9 921**
Retired participants and beneficiaries	
Number	82 312
Annual benefits (thousands of United States dollars)	2 662 125
Average benefit (United States dollars)	**32 342**

Note 19
Commitments and contingencies

19.1 Investment commitments

173. As at 31 December 2022 and 31 December 2021, the Fund was committed to the following investment commitments:

(Thousands of United States dollars)

	31 December 2022	*31 December 2021*
Real estate funds	2 850 580	2 751 886
Private equity	4 560 267	3 636 897
Infrastructure funds	87 812	320 194
Timberland funds	3 770	3 769
Total commitments	**7 502 429**	**6 712 746**

174. In the private equity, real estate, infrastructure and timberland investments, funds are drawn down in accordance with the terms and conditions of the fund agreements. The fund agreements are unique to each individual investment. Funds are drawn down to: (a) fund investments in assets that have been purchased or are being contracted for purchase; and (b) pay fees earned by the general partner or manager under the terms and conditions of the fund agreement.

19.2 Lease commitments

175. As at 31 December 2022 and 31 December 2021, the Fund was committed to the following lease commitments:

(Thousands of United States dollars)

	31 December 2022	31 December 2021
Obligations for property leases		
Less than 1 year	8 274	6 779
1–5 years	20 080	19 403
Greater than 5 years	34 523	43 154
Total property lease obligations	**62 877**	**69 336**

19.3 Legal or contingent liabilities and contingent assets

176. There are no contingent liabilities arising from legal actions and claims that are likely to result in a material liability to the Fund.

177. Contingent assets are excluded from the statement of net assets available for benefits on the basis that the inflow of economic benefits is not virtually certain but reliant on the incurrence of an event outside of the control of the Fund. There were no contingent assets as at 31 December 2022 or 31 December 2021.

Note 20
Risk assessment

178. The Fund's activities expose it to a variety of financial risks, including but not limited to credit risk, liquidity risk and market risk (including currency risk, interest rate risk and price risk).

179. The Fund's investment risk management programme is intended to measure and monitor the risk to which the Fund is exposed and to minimize potential adverse effects on the Fund's financial performance, consistent with the Fund's strategic asset allocation policy. The Investments Committee provides advice to the Representative of the Secretary-General on investment strategy and reviews the investments of the Fund at its quarterly meetings. The Committee advises on long-term policy, asset allocation and strategy, diversification by type of investment, currency and economic sector and any other matters.

180. The Fund uses appropriate methods to measure, monitor and manage the various types of financial risks to which it is exposed. These methods are explained below.

20.1 Credit risk

181. Credit risk is defined as the potential risk that a borrower or counterparty will fail to meet its obligations in accordance with agreed terms, resulting in a loss. The risk of a trading partner not fulfilling its obligations to another in a timely manner is a risk that all obligors face. Ensuring adequate control over credit risk and effective risk management is critical to the long-term sustainability of the Fund. The Fund manages risk by addressing the following important areas:

- Approving and maintaining appropriate credit exposure measurement and monitoring standards
- Establishing limits for amounts and concentrations of credit risk and monitoring and implementing a review process for credit exposure
- Ensuring adequate controls over credit risk

182. The Fund is primarily exposed to credit risk in its fixed-income asset class. The Fund manages credit risk in line with the authorized investment policy statement and the

relevant fixed-income investment benchmarks. The benchmark requires at least one well-known credit rating agency (S&P, Moody's or Fitch) to have rated the issue/issuer.

183. The tables below provide a summary of the credit ratings obtained from rating agencies (Moody's, S&P or Fitch) for the Fund's fixed-income portfolio as at 31 December 2022 and 31 December 2021. The Fund uses Moody's issue ratings as the primary source for the information shown in the tables. If the issue is not rated, then the Moody's issuer rating is used. If the issue/issuer is not evaluated by Moody's, then issue/issuer ratings are obtained from S&P or Fitch.

(Thousands of United States dollars)

	31 December 2022					
Fixed income	*Aaa/AA to Aa3/AA-*	*A1/A+ to A3/A-*	*Baa1/BBB+ to Baa3/BBB-*	*Ba1/BB+ to B3/B-*	*Not rated[a]*	*Total*
Government and agencies securities	17 945 250	216 104	447 261	132 423	26 543	18 767 581
Asset-backed securities	151 173	–	–	–	–	151 173
Corporate bonds/commercial paper	373 672	2 180 308	1 972 912	57 814	–	4 584 706
Municipal/provincial bonds	141 374	26 711	2 399	–	–	170 484
Commercial mortgage-backed	405 252	–	–	–	–	405 252
Funds – corporate bonds	–	–	–	–	52 755	52 755
Total	**19 016 721**	**2 423 123**	**2 422 572**	**190 237**	**79 298**	**24 131 951**
Percentage	**78.80**	**10.04**	**10.04**	**0.79**	**0.33**	**100.00**

[a] Six Russian Federation bonds amounting to $26.5 million and one bond fund amounting to $52.7 million were not evaluated by any credit rating agency.

(Thousands of United States dollars)

	31 December 2021					
Fixed income	*Aaa/AA to Aa3/AA-*	*A1/A+ to A3/A-*	*Baa1/BBB+ to Baa3/BBB-*	*Ba1/BB+ to B3/B-*	*Not rated[a]*	*Total*
Government and agencies securities	20 163 361	566 651	1 677 226	716 560	–	23 123 798
Asset-backed securities	207 406	–	–	–	–	207 406
Corporate bonds/commercial paper	46 301	248 130	315 997	–	–	610 428
Municipal/provincial bonds	38 991	–	–	–	–	38 991
Commercial mortgage-backed	705 297	–	–	–	–	705 297
Funds – corporate bonds	–	–	–	–	55 966	55 966
Total	**21 161 356**	**814 781**	**1 993 223**	**716 560**	**55 966**	**24 741 886**
Percentage	**85.52**	**3.29**	**8.06**	**2.90**	**0.23**	**100.00**

[a] One bond fund amounting to $56.0 million was not evaluated by any credit rating agency.

184. A maturity analysis of fixed-income securities as at 31 December 2022 and 13 December 2021 is presented as follows:

(Thousands of United States dollars)

Maturity	*31 December 2022*	*31 December 2021*
Less than 1 year	2 990 715	3 828 801
1–5 years	7 286 058	5 272 208
5–15 years	4 988 825	4 780 823
Greater than 15 years	8 866 353	10 860 054
Total	**24 131 951**	**24 741 886**

20.2 Liquidity risk

185. Liquidity risk is the risk of not being able to meet the cash requirements for the Fund's obligations. Cash requirements can arise from settlement needs for various investment trades, capital calls from uncalled or unfunded commitments, and benefit payment disbursements in various currencies. The Fund manages its liquidity risk by investing the vast majority of its investments in liquid securities.

20.3 Market risk

186. Market risk is the risk of change in the value of plan assets due to various market factor movements such as asset price, interest rates, major market index movements, currency exchange rates and market volatility. The Fund has adopted value at risk (VaR) as a parameter to measure the market risk, in addition to standard deviation and tracking risk. VaR is a universally accepted parameter to communicate market risk for financial and asset management institutions. The Fund also has risk tolerance for investment risks in the investment policy approved by the Representative of the Secretary-General. On the basis of this risk tolerance, a risk budget has been assigned to each portfolio manager. The risk budget is modified once a year.

187. VaR, as a single number, summarizes the portfolio's exposure to market risk and the probability of an adverse move, or, in other words, level of risk. The main purpose of VaR is to assess market risks that result from changes in market prices. There are three key characteristics of VaR: (a) the amount (in percentage or dollar terms); (b) the time horizon (in this case, one year); and (c) the confidence level (in this case, 95 per cent). When reported as 95 per cent confidence, the VaR 95 number (in percentage or in dollar terms) indicates that there is a 95 per cent chance that portfolio losses will not exceed the given VaR 95 number (in percentage or dollar terms) over a year. In addition, the Fund reports tail risk or expected shortfall, which measures the average expected loss for the 5 per cent of the time when the losses exceed VaR 95. The Fund also reports contribution to risk. Considering the risk of the whole Fund as 100 per cent, contribution to risk indicates how much of the risk is contributed by that asset class. Contribution to risk is additive (all contributions will add up to 100 per cent). VaR 95 is not additive owing to the diversification effect.

188. The table below depicts four important aspects of risk. It shows volatility or standard deviation in percentage, followed by VaR 95 for the given portfolio in percentage terms. Contribution to risk indicates how much each asset class contributes to the total Fund risk. Clearly, total Fund risk is 100 per cent and each of the asset classes below indicates the contribution to the risk. Expected shortfall at 5 per cent (because the Fund is indicating VaR at 95 per cent), indicates the average value or expected value of losses for the 5 per cent of the times when losses exceed VaR 95.

189. All numbers in the tables below are reported for a one-year term horizon. For 2022, the estimated volatility on an absolute basis (benchmark not included) of the total Fund was 14.81 per cent, the estimated VaR (95 per cent) was 20.65 per cent and

the estimated expected shortfall (5 per cent) was 36.86 per cent. VaR of 20.65 per cent indicates that there is a 95 per cent chance that portfolio losses will not exceed 20.65 per cent over a year. The asset class with the lowest VaR (lowest risk) is cash and short term, followed by fixed income and total equities. The asset class with the highest VaR (highest risk) is real assets, followed by equity and private equity. The contribution to risk statistics is driven by the asset class: (a) risk; (b) weights in portfolio; and (c) correlation with other assets in the portfolio. Accordingly, for 2022, the equity portfolio contributed 70.46 per cent to total fund risk, while fixed income contributed 1.01 per cent, real assets 17.21 per cent and private equity 11.32 per cent. As at 31 December 2022, equities represented 50.37 per cent of the net assets available for benefits.

190. All numbers in the tables below are annualized using historical simulation.

(Percentage)

	2022			
Asset class	*Volatility (standard deviation)*	*VaR (95 per cent)*	*Contribution to risk*	*Expected shortfall (5 per cent)*
Total Fund	14.81	20.65	100.00	36.86
Equity	20.90	28.36	70.46	52.11
Fixed income	4.91	8.65	1.01	12.45
Cash and short term	0.07	0.11	0.00	0.19
Real assets	28.55	39.18	17.21	72.10
Private equity	20.60	29.82	11.32	51.98

Note: Figures are reported from MSCI RiskMetrics as at 31 December 2022. Percentages are rounded to the nearest two decimal places; 0.00 indicates a value smaller than 0.01 but not zero.

	2021			
Asset class	*Volatility (standard deviation)*	*VaR (95 per cent)*	*Contribution to risk*	*Expected shortfall (5 per cent)*
Total Fund	13.41	17.39	100.00	34.07
Equity	18.81	24.26	80.20	47.81
Fixed income	2.98	4.30	(0.52)	7.12
Cash and short term	0.06	0.10	0.00	0.14
Real assets	26.34	30.98	11.53	67.04
Private equity	17.95	24.99	8.79	46.64

Note: Figures are reported from MSCI RiskMetrics as at 31 December 2021. Percentages are rounded to the nearest two decimal places; 0.00 indicates a value smaller than 0.01 but not zero.

191. The increased volatility (standard deviation), VaR (95 per cent) and expected shortfall (5 per cent) in 2022 and 2021 were due to the unprecedented equity market volatility caused primarily by global economic and policy factors, including the COVID-19 pandemic, interest rate rises and other geopolitical events.

192. Although VaR is an important tool for measuring market risk, the assumptions on which the model is based give rise to some limitations. Key assumptions include a one-day holding period to hedge or dispose of positions, which may not be the case for illiquid assets or may be due to adverse market conditions; a 95 per cent confidence level, which indicates that there is a 5 per cent probability of losses exceeding the VaR at 95 per cent; VaR calculated on an end-of-day basis, which does not reflect changes

during the trading day; and the use of historical data and the Monte Carlo simulation, which may not cover all possible scenarios, especially those of an exceptional nature.

Price risk

193. The Fund is exposed to equity securities price risk. This arises from investments held by the Fund for which prices in the future are uncertain. Where non-monetary financial instruments – for example, equity securities – are denominated in currencies other than the dollar, the price is initially expressed in non-dollar-denominated currency and is then converted into dollars, which will also fluctuate because of changes in currency exchange rates.

194. As at 31 December 2022 and 31 December 2021, the fair value of equities exposed to price risk was as follows:

(Thousands of United States dollars)

	31 December 2022	*31 December 2021*
Common and preferred stock	38 513 809	50 146 375
Funds – exchange traded funds	672 026	1 800 533
Funds – common stock	8 479	14 174
Stapled securities	52 042	61 545
Total equity instruments	**39 246 356**	**52 022 627**

195. Considering the total Fund risk as 100 per cent, the contribution to risk due to equities is 70.46 per cent (2021: 80.20 per cent) of the total Fund risk and the rest is contributed by all other asset classes.

196. The Fund also manages its exposure to price risk by analysing the investment portfolio by industrial sector and benchmarking the sector weights.

197. The Fund's equity investment portfolio by industrial sector based on the General Industry Classification Standard as at 31 December 2022 and 31 December 2021 was as follows:

(Percentage)

	31 December 2022		*31 December 2021*	
General Industry Classification Standard	*Fund's equity portfolio*	*Benchmark*[a]	*Fund's equity portfolio*	*Benchmark*[b]
Financials	16.70	16.70	14.77	15.59
Information technology	21.16	21.04	23.88	25.35
Communication services	7.24	7.01	8.81	9.51
Consumer discretionary	11.56	11.71	13.00	13.35
Consumer staples	7.34	7.51	6.14	6.65
Energy	0.11	0.12	0.04	0.04
Health care	14.89	14.47	12.05	11.82
Industrials	9.70	10.14	8.99	8.17
Materials	4.77	5.43	4.22	4.98
Utilities	1.84	2.20	1.40	1.71

	31 December 2022		*31 December 2021*	
General Industry Classification Standard	*Fund's equity portfolio*	*Benchmark*[a]	*Fund's equity portfolio*	*Benchmark*[b]
Real estate	2.94	3.67	2.62	2.83
Other	1.75	Not applicable	4.08	Not applicable
Total	**100.00**	**100.00**	**100.00**	**100.00**

[a] Benchmark source: MSCI All-Country World Index, customized to exclude investments in armaments, tobacco and fossil fuels, according to sustainability policies.
[b] Benchmark source: 80 per cent MSCI World Developed Markets Environmental, Social and Governance Indexes and 20 per cent MSCI Emerging Markets Environmental, Social and Governance Indexes, customized to exclude tobacco and certain modalities of armament and thermal coal companies.

198. The following table presents an analysis of the Fund's concentration of equity price risk in the Fund's equity portfolio by geographical distribution, based on the counterparty's place of primary listing or, if not listed, place of domicile.

	31 December 2022	*31 December 2021*
North America	64.4	61.4
Europe	14.8	14.9
Asia Pacific	9.3	7.9
Emerging markets	11.5	15.8
Total	**100.0**	**100.0**

Currency risk

199. The Fund is one of the most globally diversified pension funds in the world and therefore holds both monetary and non-monetary assets denominated in currencies other than the dollar, the Fund's base currency. Currency exchange risk arises as the value of financial instruments denominated in other currencies fluctuates owing to changes in currency exchange rates. Management monitors the exposure to all currencies. The unrealized foreign exchange gain/loss is attributable primarily to the fluctuation in currency exchange rates during the period.

200. The Fund does not use hedging to manage its non-dollar-denominated currency risk exposure, because the Fund expects currency impact to net out to zero over a full market cycle, as has been the case historically. Currency risk refers to risk due to foreign exchange rate changes.

201. The tables below illustrate the foreign exchange risk exposure of the Fund by class of investments. These summarize the Fund's cash and investments at fair value as at 31 December 2022 and 31 December 2021. Net financial liabilities amounting to $270.7 million in 2022 (2021: $22.1 million) not held at fair value (see note 5) are excluded from this table. Assets held in exchange-traded funds are included as dollar assets.

	As at 31 December 2022					
Currency	*Equity*	*Fixed income*	*Real assets*	*Alternative and other*	*Cash*	*Total*
United States dollar	32.00	29.98	7.93	7.13	0.93	77.97
Euro	3.59	–	0.71	1.15	0.01	5.46
Japanese yen	3.22	–	0.20	–	0.00	3.42
British pound sterling	1.66	–	0.16	0.11	0.00	1.93
Hong Kong dollar	1.89	–	–	–	0.00	1.89
Canadian dollar	1.50	–	0.35	–	0.00	1.85
Swiss franc	1.26	–	–	–	0.01	1.27
Australian dollar	0.97	–	0.24	–	0.00	1.21
Republic of Korea won	0.66	0.09	–	–	0.00	0.75
Indian rupee	0.68	–	–	–	0.00	0.68
Swedish krona	0.45	–	–	–	0.00	0.45
Danish krone	0.40	–	–	–	0.00	0.40
Chinese yuan (renminbi)	0.37	–	–	–	0.00	0.37
Brazilian real	0.23	0.09	–	–	0.00	0.32
Mexican peso	0.21	0.08	–	–	0.00	0.29
South African rand	0.20	0.07	–	–	0.00	0.27
Singapore dollar	0.20	–	–	–	0.00	0.20
Thai baht	0.11	0.08	–	–	0.00	0.19
Indonesian rupiah	0.11	0.09	–	–	0.00	0.20
Malaysian ringgit	0.08	0.09	–	–	0.00	0.17
Russian rouble	0.13	0.03	–	–	0.00	0.16
Philippine peso	0.05	0.04	–	–	0.00	0.09
United Arab Emirates dirham	0.08	–	–	–	0.00	0.08
Polish zloty	0.03	0.05	–	–	0.00	0.08
New Israeli shekel	0.03	0.04	–	–	0.00	0.07
Hungarian forint	0.02	0.02	–	–	0.00	0.04
Czech koruna	–	0.04	–	–	0.00	0.04
Chilean peso	0.01	0.02	–	–	–	0.03
Norwegian krone	0.03	–	–	–	0.00	0.03
Colombian peso	0.00	0.02	–	–	0.00	0.02
New Zealand dollar	0.02	–	–	–	0.00	0.02
Romanian leu	–	0.02	–	–	0.00	0.02
Peruvian sol	–	0.02	–	–	0.00	0.02
Turkish lira	–	0.01	–	–	–	0.01
African franc	–	–	–	–	0.00	0.00
Pakistani rupee	–	–	–	–	0.00	0.00
Total	**50.19**	**30.88**	**9.59**	**8.39**	**0.95**	**100.00**

Note: Percentages are rounded to the nearest two decimal places; 0.00 indicates a value smaller than 0.01 but not zero.

	As at 31 December 2021					
Currency	*Equity*	*Fixed income*	*Real assets*	*Alternative and other*	*Cash*	*Total*
United States dollar	36.45	23.33	5.76	6.00	1.74	73.28
Euro	4.05	0.03	0.69	0.94	0.01	5.72
Japanese yen	3.08	–	0.13	–	0.00	3.21
Hong Kong dollar	2.56	–	–	–	0.00	2.56
British pound sterling	1.93	–	0.15	0.14	0.00	2.22
Canadian dollar	1.47	0.02	0.30	–	0.00	1.79
Republic of Korea won	1.19	0.40	–	–	0.00	1.59
Swiss franc	1.43	–	–	–	0.00	1.43
Australian dollar	0.85	0.00	0.21	–	0.00	1.06
Indian rupee	0.93	0.10	–	–	0.00	1.03
Mexican peso	0.27	0.43	–	–	0.00	0.70
Brazilian real	0.27	0.40	–	–	0.00	0.67
Swedish krona	0.62	–	–	–	0.00	0.62
Indonesian rupiah	0.12	0.43	–	–	0.00	0.55
South African rand	0.28	0.18	–	–	0.00	0.46
Russian rouble	0.09	0.35	–	–	0.01	0.45
Malaysian ringgit	0.09	0.32	–	–	0.00	0.41
Danish krone	0.38	–	–	–	0.00	0.38
Chinese yuan (renminbi)	0.34	–	–	–	0.00	0.34
Thai baht	0.07	0.24	–	–	0.00	0.31
Polish zloty	0.03	0.17	–	–	0.00	0.20
Egyptian pound	–	0.18	–	–	0.00	0.18
Philippine peso	0.07	0.09	–	–	0.00	0.16
Singapore dollar	0.14	–	–	–	–	0.14
New Israeli shekel	0.02	0.07	–	–	0.00	0.09
United Arab Emirates dirham	0.07	–	–	–	0.00	0.07
Hungarian forint	0.01	0.05	–	–	0.00	0.06
Czech koruna	–	0.07	–	–	0.00	0.07
Peruvian sol	–	0.06	–	–	0.00	0.06
Colombian peso	–	0.05	–	–	0.00	0.05
Turkish lira	0.01	0.03	–	–	0.00	0.04
Chilean peso	–	0.03	–	–	0.00	0.03
Norwegian krone	0.03	0.00	–	–	0.00	0.03
Romanian leu	–	0.02	–	–	0.00	0.02
New Zealand dollar	0.02	–	–	–	0.00	0.02
Total	**56.87**	**27.05**	**7.24**	**7.08**	**1.76**	**100.00**

Note: Percentages are rounded to the nearest two decimal places; 0.00 indicates a value smaller than 0.01 but not zero.

Interest rate risk

202. Interest rate risk arises from the effects of fluctuations in the prevailing levels of market interest rates on the fair value of financial assets and liabilities and future cash flows. The Fund holds fixed-interest rate securities, floating-rate debt instruments, cash and cash equivalents that expose the Fund to interest rate risk.

203. The table below presents a summary of the Fund's relative sensitivity to interest rate changes versus its reference fixed-income benchmark. This measure of duration for the portfolio indicates the approximate percentage change in the value of the portfolio if interest rates change by 100 basis points.

(Percentage)

	2022		*2021*	
	Fund	*Benchmark*	*Fund*	*Benchmark*
Effective duration	6.58	6.28	5.00	5.83

204. Effective duration is the sensitivity to interest rates. This means if the interest rate changes by 1 per cent, the Fund can lose or gain approximately 6.58 per cent (2021: 5.00 per cent) compared with the benchmark, which can lose or gain approximately 6.28 per cent (2021: 5.83 per cent). This arises primarily from the increase/decrease in the fair value of fixed-interest securities. Floating-rate debt instruments comprise less than 2 per cent (2021: 1 per cent) of the total fixed-income investments as at 31 December 2022.

Note 21
Budget information: reconciliation between the actual amounts on a comparable basis and the statement of changes in net assets available for benefits

205. Differences between the actual amounts on a comparable basis with the budget and the actual amounts recognized in the financial statements can be classified into the following:

(a) Basis differences, which occur when the approved budget is prepared on a basis other than the accounting basis, as stated in note 3.14;

(b) Timing differences, which occur when the budget period differs from the reporting period reflected in the financial statements. There are no timing differences for the Fund for the purpose of comparison of budget and actual amounts;

(c) Entity differences, which occur when the budget omits programmes or entities that are part of the entity for which the financial statements are prepared. There are no entity differences for the Fund.

(Thousands of United States dollars)

	2022	*2021*
Actual amount on a comparable basis	**112 922**	**99 602**
Basis differences		
Asset additions/disposals	(1 721)	(378)
Depreciation, amortization and impairment	318	–
Unliquidated obligations	(4 392)	(5 857)
Prepayments	101	1 565
Employee benefits	(25 345)	3 390
Other accruals	1 157	688
Actual amount for administrative expenses in the statement of changes in net assets available for benefits	**83 040**	**99 010**

206. The above reconciliation illustrates key differences between total administrative expenditure on a budget basis (modified cash basis) and total expenditure on an IPSAS basis. The main differences can be categorized as follows:

- Depreciation/amortization expense: Fixed assets and intangible assets meeting the threshold for capitalization are capitalized and depreciated/amortized over their useful lives on an IPSAS basis. Only depreciation/amortization expense is recognized over the useful lives of the asset, whereas the total expense is recognized on a budget basis at the time of acquisition.

- Expense recognition: On a budget basis, expenditure is recognized at the time of disbursement or commitment as unliquidated obligations. Under IPSAS, expenses are recognized at the time goods or services are received. Unliquidated obligations for goods or services not received or prepayments are not recognized as expense. Economic services received but not yet paid for are recognized as expense under IPSAS.

- Employee benefits: On a budget basis, employee benefit expenses are recognized when the benefit is paid. Under IPSAS, an expense for an employee benefit should be recognized in the period in which the benefit is earned, regardless of time of payment. IPSAS therefore recognizes expenses for post-employment benefits such as after service health insurance, annual leave or repatriation benefits.

Note 22
Funds under management

207. Funds under management are defined as other United Nations funds for which the Fund has engaged the services of external fund managers, independent of the Fund.

208. Pursuant to General Assembly resolutions 2951 (XXVII), by which the Assembly established the United Nations University (UNU), and 3081 (XXVIII) and article IX of the UNU Charter (A/9149/Add.2), the Office of Investment Management is providing oversight services for the investments of the United Nations University Endowment Fund that are outsourced to BlackRock financial managers with a separate custodian bank. Formal arrangements between the Office and the Endowment Fund regarding these services have been agreed upon. Resulting funds are reflected in the accounts of UNU. There is no commingling of investment funds with those of the Fund, which are maintained separately. Costs of the Office's management advisory fees, amounting to $50,000 per year, are reimbursed by the Endowment Fund to the Office and recorded as other investment-related income.

Note 23
Related party transactions

Key management personnel

209. Key management personnel remunerated by the Fund for the years ended 31 December 2022 and 31 December 2021 are as follows:

	Number of individuals	Compensation and post adjustment	Entitlements	Pension and health plans	Total remuneration	Outstanding advances against entitlements	Outstanding loans
		(Thousands of United States dollars)					
2022	5	1 141	295	272	1 708	–	–
2021	5	1 126	306	277	1 709	–	–

210. Key management personnel are the Chief Executive of Pension Administration, the Representative of the Secretary-General, the Deputy Chief Executive of Pension Administration, the Chief Investment Officer and the Chief Financial Officer, given that they have the authority and responsibility for planning, directing and controlling the activities of the Fund (see note 1.2).

211. The aggregate remuneration paid to key management personnel includes net salaries, post adjustment and entitlements such as representation allowance and other allowances, assignment and other grants, rental subsidy, personal effect shipment costs, and employer pension and current health insurance contributions.

212. There were no outstanding advances against entitlements of key management personnel as at 31 December 2022 and 31 December 2021.

213. Key management personnel are also qualified for post-employment benefits (see note 11) on the same basis as other employees. The actuarial valuation of the benefits for the key management personnel are as follows:

(Thousands of United States dollars)

	31 December 2022	*31 December 2021*
After-service health insurance	1 252	1 602
Repatriation grant	300	364
Annual leave	179	217
Total	**1 731**	**2 183**

Other related parties

214. The following are considered related parties, and a summary of the Fund’s relationship with these parties is provided below.

General Assembly

215. The General Assembly is the highest legislative body for the Fund. It reviews reports submitted by the Pension Board, approves the budgets for the Fund, decides on the admittance of new member organizations to the Fund and amends the Regulations of the Fund.

Member organizations participating in the Fund

216. Member organizations of the Fund (international, intergovernmental organizations) join the Fund by decision of the General Assembly upon the recommendation of the Pension Board and at the time of admission agree to adhere to the Regulations of the Fund. Each Fund member organization has a staff pension committee and a secretary to the committee; the committees and their secretariat are an integral part of the Fund’s administration.

217. The United Nations is the largest member organization of the Fund, and the United Nations Secretariat serves as its host organization and provides administrative support services. The Fund provides services to the United Nations Staff Pension Committee secretariat. The exchange of services between the Fund and the United Nations is governed by and remunerated according to the agreed annual service-level agreements between both entities.

United Nations International Computing Centre

218. The United Nations International Computing Centre was established in January 1971 pursuant to General Assembly resolution 2741 (XXV) and provides information and communications technology services to partners and users in the United Nations system. As a partner bound by the mandate of the Centre, the Fund would be proportionately responsible for any third-party claim or liability arising from or related to service activities of the Centre as specified in the Centre's mandate. As at 31 December 2022, there were no known claims that affected the Fund. Ownership of assets is with the Centre until dissolution. Upon dissolution, the division of all assets and liabilities among partner organizations shall be agreed by the Management Committee by a formula defined at that time.

219. The role of the Centre is to:

- Provide information technology services on a full cost-recovery basis
- Assist in exploiting networking and computing technology
- Provide information management services
- Advise on questions related to information management
- Provide specialized training

Annex to the notes to the financial statements

Statistics on the operations of the United Nations Joint Staff Pension Fund

Table 1
Number of participants

Member organization	*Participants as at 31 December 2021*	*New entrants*	*Transfer*		*Separations*	*Adjustments*[a]	*Participants as at 31 December 2022*	*Percentage increase/(decrease)*
			In	*Out*				
United Nations[b]	86 827	8 237	299	300	5 478	139	89 446	3.0
Food and Agriculture Organization of the United Nations[c]	13 900	2 793	94	104	672	21	15 990	15.0
World Health Organization	11 310	993	100	56	785	11	11 551	2.1
International Organization for Migration	8 636	1 783	46	56	441	–	9 968	15.4
International Labour Organization	4 283	435	41	40	310	3	4 406	2.9
International Atomic Energy Agency	2 743	176	17	39	207	3	2 687	(2.0)
United Nations Educational, Scientific and Cultural Organization	2 539	234	26	23	167	8	2 601	2.4
World Intellectual Property Organization	1 210	50	7	4	63	–	1 200	(0.8)
International Criminal Court	1 166	43	15	26	90	1	1 107	(5.1)
International Telecommunication Union	778	46	8	4	45	2	781	0.4
International Civil Aviation Organization	720	41	11	5	42	–	725	0.7
United Nations Industrial Development Organization	713	45	2	6	50	1	703	(1.4)
International Fund for Agricultural Development	646	55	17	8	43	2	665	2.9
World Meteorological Organization	388	51	9	3	38	–	407	4.9
International Maritime Organization	345	27	2	5	16	–	353	2.3
Comprehensive Nuclear-Test-Ban Treaty Organization	329	25	16	9	18	–	343	4.3
Special Tribunal for Lebanon	259	2	–	22	53	–	186	(28.2)
International Centre for Genetic Engineering and Biotechnology	169	18	–	3	10	–	174	3.0
World Tourism Organization	87	11	1	–	2	–	97	11.5
International Seabed Authority	48	10	3	2	5	–	54	12.5
International Centre for the Study of the Preservation and Restoration of Cultural Property	47	4	–	–	1	–	50	6.4
Inter-Parliamentary Union	45	2	–	–	3	–	44	(2.2)

Member organization	Participants as at 31 December 2021	New entrants	Transfer		Separations	Adjustments[a]	Participants as at 31 December 2022	Percentage increase/(decrease)
			In	Out				
International Tribunal for the Law of the Sea	40	1	1	–	3	–	39	(2.5)
European and Mediterranean Plant Protection Organization	19	4	–	–	2	–	21	10.5
Wassenaar Arrangement	14	2	–	–	2	–	14	0.0
Total	**137 261**	**15 088**	**715**	**715**	**8 546**	**191**	**143 612**	**4.6**

[a] Corrections of erroneous entries from prior years.
[b] United Nations Headquarters, regional offices and all funds and programmes.
[c] Including the World Food Programme.

Table 2

Benefits awarded to participants or their beneficiaries during the year ended 31 December 2022

Member organization	Number of benefits awarded											
	Retirement benefit	Early retirement benefit	Deferred retirement benefit	Withdrawal settlement < 5 years	Withdrawal settlement > 5 years	Child benefit	Widow and widower benefit	Other death benefit	Disability benefit	Secondary dependency benefit	Transfer under agreement	Total
United Nations[a]	949	409	476	2 491	950	1 009	103	–	59	–	14	6 460
Food and Agriculture Organization of the United Nations[b]	143	64	64	259	108	108	22	–	1	–	6	775
World Health Organization	212	58	60	324	107	140	10	–	5	–	5	921
International Organization for Migration	24	2	15	307	85	17	4	–	4	–	–	458
International Labour Organization	52	24	7	166	56	20	2	–	1	–	1	329
International Atomic Energy Agency	59	22	38	68	15	19	1	–	4	–	1	227
United Nations Educational, Scientific and Cultural Organization	41	22	16	65	16	19	–	–	5	–	2	186
World Intellectual Property Organization	17	11	6	23	3	2	1	–	–	–	1	64
International Criminal Court	8	6	9	29	34	6	–	–	2	–	1	95
International Telecommunication Union	16	6	2	15	4	4	–	–	2	–	–	49
International Civil Aviation Organization	15	6	5	11	5	8	–	–	–	–	–	50
United Nations Industrial Development Organization	21	10	2	12	1	17	1	–	2	–	–	66
International Fund for Agricultural Development	9	7	4	18	–	3	–	–	2	–	3	46
World Meteorological Organization	13	6	5	13	–	8	–	–	1	–	–	46
International Maritime Organization	6	4	1	4	1	1	–	–	–	–	–	17
Comprehensive Nuclear-Test-Ban Treaty Organization	2	–	1	15	–	–	–	–	–	–	–	18
Special Tribunal for Lebanon	3	1	8	18	23	3	–	–	–	–	–	56
International Centre for Genetic Engineering and Biotechnology	4	3	–	2	1	–	–	–	–	–	–	10
World Tourism Organization	–	1	–	1	–	–	–	–	–	–	–	2
International Seabed Authority	1	–	1	2	1	–	–	–	–	–	–	5
International Centre for the Study of the Preservation and Restoration of Cultural Property	1	–	–	–	–	1	–	–	–	–	–	2
Inter-Parliamentary Union	1	–	1	–	–	1	–	–	–	–	1	4
International Tribunal for the Law of the Sea	–	1	–	2	–	1	–	–	–	–	–	4

	Number of benefits awarded											
				Withdrawal settlement								
Member organization	*Retirement benefit*	*Early retirement benefit*	*Deferred retirement benefit*	*< 5 years*	*> 5 years*	*Child benefit*	*Widow and widower benefit*	*Other death benefit*	*Disability benefit*	*Secondary dependency benefit*	*Transfer under agreement*	*Total*
European and Mediterranean Plant Protection Organization	1	–	–	1	–	–	–	–	–	–	–	2
Wassenaar Arrangement	2	–	–	–	–	2	–	–	–	–	–	4
Total	**1 600**	**663**	**721**	**3 846**	**1 410**	**1 389**	**144**	**–**	**88**	**–**	**35**	**9 896**
Table 1 separations	1 600	663	721	3 846	1 410	39	144	–	88	–	35	8 546
One-time benefits	–	–	–	3 846	1 410	–	–	–	–	–	35	5 291
Table 4 new	1 600	663	721	–	–	1 389	144	–	88	–	–	4 605

[a] United Nations Headquarters, regional offices and all funds and programmes.
[b] Including the World Food Programme.

Table 3
Benefits awarded to participants or their beneficiaries during the year ended 31 December 2021

Member organization	*Number of benefits awarded*											
	Retirement benefit	*Early retirement benefit*	*Deferred retirement benefit*	*Withdrawal settlement < 5 years*	*Withdrawal settlement > 5 years*	*Child benefit*	*Widow and widower benefit*	*Other death benefit*	*Disability benefit*	*Secondary dependency benefit*	*Transfer under agreement*	*Total*
United Nations[a]	877	507	353	2 703	1 483	1 391	157	–	86	2	23	7 582
Food and Agriculture Organization of the United Nations[b]	94	58	52	313	95	146	27	–	4	1	3	793
World Health Organization	102	62	35	281	140	152	20	–	7	–	2	801
International Organization for Migration	23	9	15	307	86	30	8	–	–	1	–	479
International Labour Organization	51	19	19	121	24	25	9	–	3	–	–	271
International Atomic Energy Agency	70	15	29	46	6	19	2	–	2	–	–	189
United Nations Educational, Scientific and Cultural Organization	44	17	24	64	7	17	3	–	5	–	–	181
World Intellectual Property Organization	18	9	7	22	–	5	1	–	3	–	–	65
International Criminal Court	9	3	5	29	16	2	1	–	–	–	–	65
International Telecommunication Union	16	5	2	12	4	4	–	–	2	–	–	45
International Civil Aviation Organization	19	5	7	10	6	6	1	–	1	–	–	55
United Nations Industrial Development Organization	18	7	–	13	1	5	–	–	3	–	–	47
International Fund for Agricultural Development	12	10	10	16	1	7	2	–	–	–	2	60
World Meteorological Organization	7	3	1	9	1	10	–	–	–	–	–	31
International Maritime Organization	9	4	–	11	2	3	–	–	1	–	–	30
Comprehensive Nuclear-Test-Ban Treaty Organization	1	–	1	12	1	–	–	–	1	–	–	16
Special Tribunal for Lebanon	5	1	12	47	56	4	–	–	–	–	–	125
International Centre for Genetic Engineering and Biotechnology	3	3	4	–	–	2	–	–	–	–	–	12
World Tourism Organization	2	1	–	1	1	–	–	–	–	–	–	5
International Seabed Authority	4	–	–	1	–	2	–	–	–	–	–	7
International Centre for the Study of the Preservation and Restoration of Cultural Property	2	–	–	5	–	–	–	–	–	–	–	7
Inter-Parliamentary Union	–	1	–	–	1	–	–	–	–	–	–	2
International Tribunal for the Law of the Sea	1	–	–	–	–	–	–	–	–	–	–	1

	Number of benefits awarded											
				Withdrawal settlement								
Member organization	*Retirement benefit*	*Early retirement benefit*	*Deferred retirement benefit*	*< 5 years*	*> 5 years*	*Child benefit*	*Widow and widower benefit*	*Other death benefit*	*Disability benefit*	*Secondary dependency benefit*	*Transfer under agreement*	*Total*
European and Mediterranean Plant Protection Organization	1	–	–	–	–	–	–	–	–	–	–	1
Wassenaar Arrangement	–	–	–	–	–	–	–	–	–	–	–	–
Total	**1 388**	**739**	**576**	**4 023**	**1 931**	**1 830**	**231**	**–**	**118**	**4**	**30**	**10 870**

[a] United Nations Headquarters, regional offices and all funds and programmes.
[b] Including the World Food Programme.

Table 4
Analysis of periodic benefits for the year ended 31 December 2022

Type of benefit	*Total as at 31 December 2021*	*New*	*Benefits discontinued, resulting in award of survivor benefit*[a]	*All other benefits discontinued*	*Total as at 31 December 2022*	*Percent increase/(decrease)*
Retirement	29 461	1 600	(378)	(479)	30 204	2.5
Early retirement	17 351	663	(201)	(303)	17 510	0.9
Deferred retirement	9 034	721	(50)	(207)	9 498	5.1
Widow	12 333	126	712	(565)	12 606	2.2
Widower	1 234	18	83	(62)	1 273	3.2
Disability	1 927	88	(24)	(42)	1 949	1.1
Child	10 048	1 353	–	(1 360)	10 041	(0.1)
Child with disability	891	36	–	(51)	876	(1.7)
Secondary dependant	33	–	–	(2)	31	(6.1)
Total	**82 312**	**4 605**	**142**	**(3 071)**	**83 988**	**2.0**

[a] Benefits discontinued resulting in the award of a survivor benefit can result in a greater number of survivor benefits than those discontinued. This occurs because multiple survivor benefits can be awarded as a result of the discontinuation of a main participant’s terminated benefit. In addition, survivor benefits may be awarded in the year or years subsequent to the year in which a primary participant’s benefit was discontinued, leading to timing differences.

Table 5
Inventory of deferred and active entitlement cases

	As at 31 December 2022		*As at 31 December 2021*	
	Number	*Percentage*	*Number*	*Percentage*
No payment due at all				
Possible re-employment under article 21 of the Regulations of the Fund	52	1	20	<1
No immediate payment due				
Deferred retirement benefit under article 30 of the Regulations of the Fund (payment not due until retirement age or from early retirement age)	326		331	
Deferment of choice under article 32 of the Regulations of the Fund (election/payment of benefits deferred by the beneficiary up to 36 months)	3 667		4 313	
Subtotal	**3 993**	**79**	**4 644**	**82.6**
Not ready for payment				
Cases reviewed but more information/clarification required	786	16	758	13.5
For payment (case inventory)				
Cases in progress	75		87	
Cases scheduled for review	122		110	
Subtotal	**197**	**4**	**197**	**3.5**
Total	**5 028**		**5 619**	