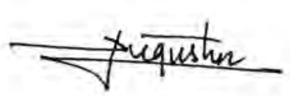

# Financial Statements

# Statement by the members of the Board

In our opinion, the accompanying financial statements of the funds managed by the Central Provident Fund Board (the "Board") as set out on pages 60 to 145 are drawn up so as to give a true and fair view of the net assets of the funds managed by the Board as at 31 December 2018, and the changes in these fund balances and cash flows for the financial year then ended.

On behalf of the Board

**Chiang Chie Foo**
Chairman



**Augustin Lee**
Chief Executive Officer

8 May 2019



# Independent auditors' report

## Members of the Board / Central Provident Fund Board

### Report on the audit of the financial statements

#### Opinion

We have audited the financial statements of the funds managed by the Central Provident Fund Board ('the Board'), which comprise the statement of net assets of funds managed by the Board as at 31 December 2018, the statement of changes in fund balances and the statement of cash flows of the funds for the year then ended, and notes to the financial statements, including a summary of significant accounting policies, as set out on pages 60 to 145.

In our opinion, the accompanying financial statements are properly drawn up in accordance with the provisions of the Central Provident Fund Act Chapter 36, Revised Edition 2013 ('the Act') and Statutory Board Financial Reporting Standards so as to present fairly, in all material respects, the net assets of the funds managed by the Board as at 31 December 2018 and the changes in these fund balances and cash flows for the year ended on that date.

#### Basis for opinion

We conducted our audit in accordance with Singapore Standards on Auditing ('SSAs'). Our responsibilities under those standards are further described in the *'Auditors' responsibilities for the audit of the financial statements'* section of our report. We are independent of the Board in accordance with the Accounting and Corporate Regulatory Authority *Code of Professional Conduct and Ethics for Public Accountants and Accounting Entities* ('ACRA Code') together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Other information

Management is responsible for the other information contained in the annual report. Other information is defined as all information in the annual report other than the financial statements and our auditors' report thereon.

We have obtained all other information prior to the date of this auditors' report.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion 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, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

**Responsibilities of management for the financial statements**

Management is responsible for the preparation and fair presentation of the financial statements in accordance with the provisions of the Act and Statutory Board Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

A statutory board is constituted based on its Act and its dissolution requires Parliament's approval. In preparing the financial statements, management is responsible for assessing the Board's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless there is intention to wind up the Board or for the Board to cease operations.

The management of the Board is responsible for overseeing the Board's financial reporting process.

**Auditors' responsibilities for the audit of the financial statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' 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 SSAs 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 SSAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of 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 for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls.

- Obtain an understanding of internal controls 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 Board's internal controls.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Board's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' 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 auditors' report. However, future events or conditions may cause the Board to cease to continue as a going concern.

- 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 the management of the Board regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal controls that we identify during our audit.



## Report on other legal and regulatory requirements

**Opinion**

In our opinion:

(a) the receipts, expenditure, investment of moneys and the acquisition and disposal of assets by the Board during the year are, in all material respects, in accordance with the provisions of the Act; and

(b) proper accounting and other records have been kept, including records of all assets of the Board whether purchased, donated or otherwise.

**Basis for opinion**

We conducted our audit in accordance with SSAs. Our responsibilities under those standards are further described in the *'Auditors' responsibilities for the compliance audit'* section of our report. We are independent of the Board in accordance with the ACRA Code together with the ethical requirements that are relevant to our audit of the financial statements in Singapore, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the ACRA Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on management's compliance.

**Responsibilities of management for compliance with legal and regulatory requirements**

Management is responsible for ensuring that the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the Act. This responsibility includes implementing accounting and internal controls as management determines are necessary to enable compliance with the provisions of the Act.

**Auditors' responsibility for the compliance audit**

Our responsibility is to express an opinion on management's compliance based on our audit of the financial statements. We planned and performed the compliance audit to obtain reasonable assurance about whether the receipts, expenditure, investment of moneys and the acquisition and disposal of assets, are in accordance with the provisions of the Act.

Our compliance audit includes obtaining an understanding of the internal control relevant to the receipts, expenditure, investment of moneys and the acquisition and disposal of assets; and assessing the risks of material misstatement of the financial statements from non-compliance, if any, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Because of the inherent limitations in any accounting and internal control system, non-compliances may nevertheless occur and not be detected.

KPMG LLP

**KPMG LLP**
*Public Accountants and*
*Chartered Accountants*

**Singapore**
8 May 2019

# Statement of net assets of funds

## as at 31 December 2018

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| **Central Provident Fund** | | | |
| **Total assets** | | | |
| Property, plant and equipment | 3 | 166,934 | 153,646 |
| Intangible assets | 4 | 58,853 | 44,508 |
| Investments | 5 | 390,062,524 | 358,809,346 |
| Debtors and other receivables | 6 | 4,259,841 | 3,865,530 |
| Cash and cash equivalents | 7 | 403,690 | 309,714 |
| | | 394,951,842 | 363,182,744 |
| **Total liabilities** | | | |
| Deferred capital grant | 8 | 3,507 | 6,253 |
| Creditors, accruals and provisions | 9 | 620,993 | 441,667 |
| | | 624,500 | 447,920 |
| **Net assets of the Central Provident Fund** | 17 | **394,327,342** | **362,734,824** |
| **Insurance Funds** | | | |
| **Net assets** | | | |
| Home Protection Fund | 20 | **1,149,443** | **1,190,355** |
| MediShield Life Fund | 20 | **1,895,327** | **1,689,709** |
| Lifelong Income Fund | 20 | – | – |
| **Other Funds** | | | |
| Net assets of Trust Funds | 21 | **2,187,211** | **2,328,832** |

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

# Statement of changes in fund balances

## for the year ended 31 December 2018

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| **Central Provident Fund** | | | |
| Fund balances as at 1 January | | 362,734,824 | 331,942,024 |
| **Add:** | | | |
| Contributions (net of refunds) by members | 10 | 36,214,319 | 35,096,999 |
| Government grants to members | 11 | 1,982,313 | 2,038,374 |
| Dividends from Special Discounted Shares | | 172,361 | 149,344 |
| Net income from investments | 12 | 14,613,226 | 13,457,509 |
| Net change in fair value of available-for-sale financial assets | | – | 96,762 |
| Interest income from bank deposits | | 3,983 | 3,121 |
| Other operating income | 13 | 169,013 | 165,644 |
| | | 53,155,215 | 51,007,753 |
| **Less:** | | | |
| Withdrawals (net of refunds) by members | 14 | 21,112,753 | 19,859,836 |
| Net change in fair value of equity investments at fair value through other comprehensive income | | 18,030 | – |
| Net change in fair value of debt investments at fair value through other comprehensive income | | 42,365 | – |
| General and administrative expense | 15 | 27,873 | 27,319 |
| Other operating expenses | 16 | 361,676 | 327,798 |
| | | 21,562,697 | 20,214,953 |
| Net increase in the Central Provident Fund | | 31,592,518 | 30,792,800 |
| **Fund balances as at 31 December** | | **394,327,342** | **362,734,824** |
| **Represented by:** | | | |
| Members' accounts | 17 | 391,117,517 | 359,514,581 |
| General moneys of the Fund | 17 | 58,367 | 54,855 |
| Accumulated surplus | 17 | 3,103,028 | 3,053,092 |
| Fair value reserve | 17 | 48,430 | 112,296 |
| | | **394,327,342** | **362,734,824** |

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

# Statement of cash flows

## for the year ended 31 December 2018

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| **Central Provident Fund** | | | |
| **Cash flows from operating activities** | | | |
| **Net increase in the Central Provident Fund** | | **31,592,518** | **30,792,800** |
| **Adjustments for:** | | | |
| Net income from investments | 12 | (14,613,226) | (13,457,509) |
| Net change in fair value of available-for-sale financial assets | | – | (96,762) |
| Net change in fair value of equity investments at fair value through other comprehensive income | | 18,030 | – |
| Net change in fair value of debt investments at fair value through other comprehensive income | | 42,365 | – |
| Interest income from bank deposits | | (3,983) | (3,121) |
| Depreciation and amortisation | 16 | 32,774 | 24,692 |
| Government grants | 13 | (2,748) | (2,670) |
| Gain from sale of property, plant and equipment | | (18) | (19) |
| Property, plant and equipment written off | | 79 | 68 |
| Intangible assets written off | | 57 | 32 |
| **Cash generated before changes in operating assets and liabilities** | | **17,065,848** | **17,257,511** |
| **Changes in operating assets and liabilities:** | | | |
| Debtors and other receivables | | (383) | (3,758) |
| Creditors, accruals and provisions | | 102,346 | 68,245 |
| Net acquisition of special issues of Singapore Government securities | | (30,417,972) | (29,906,370) |
| Net placement of advance deposits | | (856,903) | (334,094) |
| **Cash used in operations** | | **(14,107,064)** | **(12,918,466)** |
| Interest received from special issues of Singapore Government securities, advance deposits and bank deposits | | 14,133,261 | 12,978,800 |
| **Net cash generated from operating activities** | | **26,197** | **60,334** |
| **Cash flows from investing activities** | | | |
| Payments for purchase of property, plant and equipment | | (24,926) | (18,078) |
| Payments for purchase of intangible assets | | (22,178) | (24,007) |
| Acquisition of debt and equity investments | | (430,330) | (596,386) |
| Proceeds from sale of property, plant and equipment | | 22 | 19 |
| Proceeds from sale of investments | | 258,119 | 257,406 |
| Redemption of investments and capital reduction by issuer | | 118,054 | 48,018 |
| Interest received from debt investments | | 77,895 | 72,240 |
| Dividends received | | 27,585 | 32,024 |
| **Net cash generated from/(used in) investing activities** | | **4,241** | **(228,764)** |
| **Net increase/(decrease) in cash and cash equivalents** | | **30,438** | **(168,430)** |
| Cash and cash equivalents as at 1 January | | 230,882 | 399,312 |
| **Cash and cash equivalents as at 31 December** | 7 | **261,320** | **230,882** |

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



# Notes to the financial statements

## for the year ended 31 December 2018

### 1. Domicile and activities

Central Provident Fund Board (the "Board") is a statutory board established under the Central Provident Fund Act (Chapter 36, Revised Edition 2013) (the "Act") under the purview of the Ministry of Manpower. As a statutory board, the Board is subject to the directions of the Ministry of Manpower and is required to implement policies as determined by the Ministry of Manpower and other Government ministries such as the Ministry of Finance from time to time.

The office address of the Board is 238B Thomson Road, #08-00 Tower B Novena Square, Singapore 307685.

**Funds managed by the Board**

As set out in the Act, the Board is the trustee of the Central Provident Fund ("CPF") and the administrator of the Home Protection Fund and Lifelong Income Fund. The Board also administers the MediShield Life Fund which is established under the MediShield Life Scheme Act 2015, on behalf of the Ministry of Health.

The Home Protection Fund, MediShield Life Fund and Lifelong Income Fund are collectively known as the "Insurance Funds".

The principal activities of the Board include the collection of CPF contributions, the processing of withdrawals of CPF savings by members under the various schemes and the administration of the Home Protection Fund, MediShield Life Fund and Lifelong Income Fund.

The Board is also appointed as the trustee of, and administers the Deferment Bonus Fund, CPF LIFE Bonus Fund, Trust Fund for the Special Employment Credit Scheme and other trust funds received from the Government (collectively known as "Trust Funds"). Details of the Trust Funds are disclosed in note 21.

**Central Provident Fund**

The Central Provident Fund is established by the Act. It is the national social security savings scheme of Singapore, jointly supported by employees, employers and the Government. All contributions authorised under the Act are paid into the CPF and all payments authorised under the Act are paid out of the CPF.

**Insurance Funds**

(a) The **Home Protection Fund** is set up under section 33 of the Act to account for premiums received, claims paid for home mortgage insurance cover and operating expenses incurred under the Home Protection Insurance Scheme.

(b) The **MediShield Life Fund** is set up under section 7(1) of the MediShield Life Scheme Act 2015. The MediShield Life Fund accounts for premiums and government grants received, claims paid for medical insurance cover and operating expenses incurred under the MediShield Life Scheme.

(c) The **Lifelong Income Fund** is set up under section 27N of the Act to account for premiums received, monthly payouts made and operating expenses incurred under the Lifelong Income Scheme. The Lifelong Income Scheme is designed to provide the insured member a monthly payout, starting from the annuity payout start age of the insured member, for as long as the member is alive. Investment of moneys in the Lifelong Income Fund is governed by section 27N(3) of the Act.

The assets and liabilities of the Insurance Funds are subjected to the requirements of the relevant Acts and Regulations governing the Insurance Funds. These assets and liabilities are segregated from each other, and from those of the CPF, and can only be withdrawn in accordance with the relevant legislation.

## 2. Summary of significant accounting policies

### 2.1 Basis of preparation

In its capacity as trustee of the CPF and administrator of the respective funds, all operating expenses of the Board pertaining to the funds and schemes administered are charged against the respective funds. Consequently, all the financial transactions of the Board are reported under the respective funds accordingly. The Board does not separately have any assets or liabilities.

The financial statements of the funds managed by the Board have been prepared in accordance with the provisions of the Act and Statutory Board Financial Reporting Standards ("SB-FRS"). SB-FRS include Statutory Board Financial Reporting Standards, Interpretations of SB-FRS and SB-FRS Guidance Notes as promulgated by the Accountant-General. The presentation of the financial statements of the Board is in accordance with SB-FRS 26 *Accounting and Reporting by Retirement Benefit Plan*.

The financial statements have been prepared on the historical cost basis, except as disclosed in the accounting policies below.

The financial statements are presented in Singapore Dollars (S$) which is the functional currency of the funds managed by the Board. All financial information presented in Singapore Dollars has been rounded to the nearest thousand (S$'000), except when otherwise stated.

The preparation of financial statements in conformity with SB-FRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimates are revised and in any future periods affected.

Information about critical judgments in applying accounting policies that have the most significant effects on the amounts recognised in the financial statements is included in the following notes:

Note 19.1 and 20.12 – Valuation of assets and liabilities
Note 20.10 – Valuation of insurance contract liabilities

Information about assumptions and estimation uncertainties that have a significant risk of resulting in material adjustment within the next financial year are included in the following notes:

Note 20.10 – Valuation of insurance contract liabilities
Note 20.12 – Valuation of financial instruments

Assumptions and estimates made by management are based on parameters available when the financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising beyond the control of management. Such changes are reflected in the assumptions when they occur.

### 2.2 Changes in accounting policies

The accounting policies adopted are consistent with those of the previous financial year, unless otherwise stated.

### 2.3 Basis of recognition of contributions, withdrawals, Government grants to members, interest, net income from investments and other operating income

Based on the Act and CPF Regulations:

(a) Contributions, Government grants to members and dividends from Special Discounted Shares are recognised when received and credited directly to the members' accounts.

(b) Withdrawals by members are recognised when authorised and debited from the members' accounts.

(c) Penalty interest on late contributions is recognised when received.

(d) Interest payable to members is recognised as it accrues.

Interest income from investments and interest income from bank deposits are recognised as they accrue, using the effective interest method.

Dividends from investments are recognised when the shareholder's right to receive payments has been established.

Agency fees and income from other services provided are recognised when the services have been rendered.

Rental income arising from operating leases on property, plant and equipment and investment property is accounted for on a straight-line basis over the terms of the leases. Lease incentives granted are recognised as an integral part of the total rental income, over the term of the lease. Rental income is recognised as 'other operating income'.

### 2.4 Operating expenses

All operating expenses incurred by the Board and relating to the CPF, Home Protection Fund, MediShield Life Fund and Lifelong Income Fund are charged to the respective funds when incurred.

All operating expenses of trust funds are taken up in the respective trust funds when paid.

### 2.5 Insurance contracts

Insurance contracts issued under the Home Protection Insurance Scheme, MediShield Life Scheme and Lifelong Income Scheme work on the principle of risk transfer. Insurance contracts are those contracts under which the Insurance Funds accept significant insurance risks from the insured member by agreeing to compensate the insured member or other beneficiary, if a specified uncertain future event adversely affects the insured member.

The Board is not required to unbundle any insurance contract as the accounting policy recognises all insurance premiums, claims and benefit payments, expenses and valuation of actuarial liabilities, through the changes in fund balances of the Insurance Funds.

### 2.6 Basis of recognition and measurement of insurance premiums, claims, benefits incurred and insurance contract liabilities

**(a) Premiums**

Premiums from insured members are recognised on their respective due dates. Premiums not received on the due date are recognised as revenue with the corresponding outstanding premiums receivable reported in the statement of net assets of the Insurance Funds.

**(b) Claims and benefits incurred**

Claims include surrenders, death claims and claims incurred under other claim events. Surrenders are recorded when the obligation to make the payout arises. Death claims and payments on other claim events are recorded when notified. Annuity payouts from the Lifelong Income Fund are recognised when due.

**(c) Insurance contract liabilities**

A liability for contractual benefits that are expected to be incurred in the future is recorded when the premiums are recognised. The liability is determined using assumptions considered appropriate for the policies in force. The actuarial valuation basis is determined by the Board based on the advice of the independent actuarial advisers to the Board.

### 2.7 Property, plant and equipment

Property, plant and equipment are initially recorded at cost. Subsequent to recognition, property, plant and equipment are measured at cost less accumulated depreciation and any accumulated impairment losses. Cost includes expenses incurred that are directly attributable to the acquisition of the asset. Costs of dismantlement, removal or restoration are included as part of the cost of property, plant and equipment if the obligation for dismantlement, removal or restoration is incurred as a consequence of acquiring or using the asset.

The cost of an item of property, plant and equipment below S$5,000 (2017: S$2,000) is recognised as an expense in the statement of changes in fund balances during the year in which the cost is incurred.

Subsequent costs incurred for an asset are recognised in the carrying amount of the asset, or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the funds managed by the Board and the cost of the item can be measured reliably. Costs of day-to-day servicing of property, plant and equipment are recognised as an expense when incurred.

The residual values, useful lives and depreciation methods of property, plant and equipment are reviewed at the end of each year and adjusted prospectively, if appropriate, to ensure that they reflect the expected economic benefits derived from these assets.

Property, plant and equipment are depreciated on a straight-line basis, over their estimated useful lives as follows:

| | Estimated useful life |
|---|---|
| Leasehold land | period of the lease |
| Buildings | 50 years or period of the lease, whichever is shorter |
| Building renovation and improvement | remaining life of the building |
| Machinery and equipment | 4 to 10 years |
| Furniture and fittings | 8 years |
| Data processing equipment | 3 to 5 years |

Depreciation is based on the cost of an asset less its residual value and is recognised from the date that the property, plant and equipment are installed and are ready for use. Assets classified as construction-in-progress are not depreciated, as these assets are not available for use.

The carrying amount of property, plant and equipment is reviewed for impairment when events or changes in circumstances indicate that the carrying amount may not be recoverable.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefit is expected from its use. Any gain or loss on derecognition of the asset is included in the statement of changes in fund balances in the year the asset is derecognised.

### 2.8 Intangible assets

Intangible assets consist of computer software and application system, including those under development. They are measured at cost less accumulated amortisation and any accumulated impairment losses. Cost includes expenses incurred directly to bring the asset to use or to develop the computer software or application system.

The cost of an intangible asset below S$5,000 (2017: S$2,000) is recognised as an expense in the statement of changes in fund balances during the year in which the cost is incurred.

Subsequent costs which enhance or extend the performance of computer software or application system beyond its original specifications and which can be reliably measured are recognised as capital improvements and recognised in the carrying amount of the asset. Costs associated with the support and maintenance of computer software and application systems are recognised as an expense when incurred.

The residual values, useful lives and amortisation methods of intangible assets are reviewed at the end of each year and adjusted prospectively, if appropriate, to ensure that they reflect the expected economic benefits derived from these assets.

Amortisation is calculated based on the cost of the asset, less its residual value. Intangible assets are amortised on a straight-line basis, over their estimated useful lives ranging from 3 to 5 years from the date they are available for use.

Intangible assets under development are not amortised, as these assets are not available for use.

The carrying amount of intangible assets is reviewed for impairment when events or changes in circumstances indicate that the carrying amount may not be recoverable.

An intangible asset is derecognised upon disposal or when no future economic benefit is expected from its use. Any gain or loss on derecognition of the asset is included in the statement of changes in fund balances in the year the asset is derecognised.

**2.9 Impairment of non-financial assets**

The Board assesses at each reporting date whether there is an indication that a non-financial asset may be impaired. If any indication exists, the Board makes an estimate of the recoverable amount of the asset.

The recoverable amount of an asset is the higher of its fair value less costs of disposal and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. Where the carrying amount of an asset exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In determining fair value less costs of disposal, recent market transactions are taken into account, if available. If no such transactions can be identified, the value in use, of the asset, is used as the recoverable amount.

In assessing value in use, the estimated future cash flows expected to be generated by the continuing use of the asset and from its ultimate disposal are discounted to their present value using an appropriate discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

Impairment losses are recognised in the statement of changes in fund balances.

The Board also assesses at each reporting date as to whether there is an indication that an asset previously assessed to be impaired, may no longer be so. If any indication exists, the Board makes an estimate of the recoverable amount of the asset. A previously recognised impairment loss is reversed only if there has been a change in the estimates used to determine the recoverable amount of the asset since the last impairment loss was recognised. If that is the case, the carrying amount of the asset is increased to its recoverable amount. That increase cannot exceed the carrying amount that would have been determined, net of depreciation or amortisation, had no impairment loss been recognised previously. Such reversal is recognised in the statement of changes in fund balances unless the asset is measured at revalued amount, in which case the reversal is treated as a revaluation increase.

**2.10 Leases**

**When the Board is the lessee**

Operating lease payments are recognised as an expense in the statement of changes in fund balances on a straight-line basis over the lease term. Lease incentives received are recognised as an integral part of the total lease expense, over the term of the lease.

**When the Board is the lessor**

Leases is classified as an operating lease if it does not transfer substantially all the risks and rewards incidental to the ownership. Assets leased out under operating leases include property, plant and equipment.

The accounting policy for rental income is set out in note 2.3.



**2.11 Financial instruments**

**(a) Non-derivative financial assets**

**Recognition and initial measurement**

Debtors and other receivables are recognised initially on the date that they originated. All other financial assets are initially recognised when the Board, as trustee and administrator of the funds, becomes a party to the contractual provisions of the instrument.

Financial assets are initially measured at fair value. In the case of financial assets not at fair value through profit or loss, they are initially measured at fair value plus directly attributable transaction costs.

**Assessment whether contractual cash flows are solely payments of principal and interest**

*Policy applicable from 1 January 2018*

'Principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Board considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that the condition would not be met. In making this assessment, the Board considers:

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable rate features; and
- prepayment and extension features.

**Classification and subsequent measurement**

*Policy applicable from 1 January 2018*

On initial recognition, a financial asset is classified as financial assets at amortised cost, debt investments at fair value through other comprehensive income, equity investments at fair value through other comprehensive income or financial assets at fair value through profit or loss.

Financial assets are not reclassified subsequent to their initial recognition unless there are changes to business model for managing the financial assets. Upon change in business model, all affected financial assets are to be reclassified from the first day of the first reporting period.

**(i) Financial assets at amortised cost**

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as fair value through profit or loss ("FVTPL"):

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These assets are subsequently measured at amortised cost using the effective interest method, less any impairment losses. Interest income, impairment and any gain or loss on derecognition are recognised in the statement of changes in fund balances.

**(ii) Debt investments at fair value through other comprehensive income ("FVOCI")**

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Subsequent to initial recognition, debt investments at FVOCI are measured at fair value. Any gains and losses from changes in fair value of the debt investments are recognised in the statement of changes in fund balances and presented in the fair value reserve.

Impairment losses, foreign exchange gains and losses, and interest calculated using the effective interest method, are recognised in the statement of changes in fund balances.

On derecognition, gains and losses accumulated in fair value reserve are reclassified to the statement of changes in fund balances.

**(iii) Equity investments at FVOCI**

On initial recognition of an equity investment that is not held-for-trading, the Board may irrevocably elect to designate the investment at FVOCI. The election to designate investment is made on an investment-by-investment basis.

Subsequent to initial recognition, equity investments at FVOCI are measured at fair value, and the changes are recognised in the statement of changes in fund balances and presented in the fair value reserve.

Dividends are recognised in the statement of changes in fund balances unless the dividend clearly represents a recovery of part of the cost of the investment.

**(iv) Financial assets at FVTPL**

All financial assets not classified as measured at amortised cost or FVOCI as described above are measured at FVTPL. On initial recognition, the Board may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at FVOCI as at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

After initial recognition, these assets are measured at fair value, net gains and losses, including any interest or dividend income, are recognised in the statement of changes in fund balances.

*Policy applicable before 1 January 2018*

**(i) Financial assets at FVTPL**

A financial asset is classified as financial asset at FVTPL if it is held for trading or is designated as such upon initial recognition. Financial assets are designated as FVTPL if such investments are managed and traded based on their fair value in accordance with the documented risk management and investment strategy of the Board. Attributable transaction costs are recognised as an expense when incurred. Financial assets designated as FVTPL comprise debt and equity securities.

After initial recognition, financial assets at FVTPL are measured at fair value, and the changes are recognised in the statement of changes in fund balances.

**(ii) Held-to-maturity financial assets**

If there is positive intention and ability to hold the financial assets to maturity, then such financial assets are classified as held-to-maturity. Held-to-maturity financial assets comprise investments in special issues of Singapore Government securities and advance deposits placed with the Accountant-General through the Monetary Authority of Singapore.

Subsequent to initial recognition, held-to-maturity financial assets are measured at amortised cost using the effective interest method, less any impairment losses. Any sale or reclassification of a more than insignificant amount of held-to-maturity financial assets not close to their maturity would result in the reclassification of all held-to-maturity financial assets as available-for-sale. It would also prevent the financial assets to be classified as held-to-maturity for the current and the following two years. The adjustment on measurement from amortised cost to fair value on the date of the reclassification is recognised in the fair value reserve.

**(iii) Loans and receivables**

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables comprise debtors, other receivables, cash and cash equivalents.

Subsequent to initial recognition, loans and receivables are measured at amortised cost using the effective interest method, less any impairment losses.

**(iv) Available-for-sale financial assets**

Available-for-sale financial assets are non-derivative financial assets that are designated as available-for-sale or are not classified in any of the above categories of financial assets. Available-for-sale financial assets comprise debt securities and equity securities.

Subsequent to initial recognition, available-for-sale financial assets are measured at fair value. Any gains and losses from changes in fair value of the financial assets are recognised in the statement of changes in fund balances and presented in the fair value reserve. Impairment losses, foreign exchange gains and losses, and interest calculated using the effective interest method, are recognised in the statement of changes in fund balances.

**Derecognition**

A financial asset is derecognised when the contractual rights to the cash flows from the asset has expired, or when the rights to receive the contractual cash flows on the financial asset are transferred in a transaction, in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in the transferred financial assets that is created or retained is recognised as a separate asset or liability.

**(b) Non-derivative financial liabilities**

**Initial recognition and measurement**

Financial liabilities, are initially recognised on the trade date, which is the date that the Board, as trustee and administrator of the funds, become a party to the contractual provisions of the financial instrument.

Non-derivative financial liabilities comprise creditors and other payables. Such financial liabilities are recognised initially at fair value plus any directly attributable transaction costs.

**Subsequent measurement**

Subsequent to initial recognition, these financial liabilities are measured at amortised cost using the effective interest method.

**Derecognition**

A financial liability is derecognised when the obligation under the liability is discharged, or is cancelled, or expires.

**(c) Derivative financial instruments**

The Insurance Funds hold derivative financial instruments to hedge their foreign currency risk and interest rate risk exposures. Hedge accounting is not adopted.

Derivatives are recognised initially at fair value, attributable transaction costs are recognised as an expense when incurred.

Subsequent to initial recognition, derivatives are measured at fair value, and the changes are recognised in the statement of changes in fund balances.

**Offsetting of financial assets and financial liabilities**

Financial assets and financial liabilities are offset and the net amount presented in the statement of net assets when, and only when, there are legal rights to offset the amounts, and intention to either settle on a net basis or to realise the assets and settle the liabilities simultaneously.

### 2.12 Fair value of assets and liabilities

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction on the measurement date.



**(a) Fair value measurement of financial instruments**

The fair value of an instrument is measured using quoted prices in an active market for that instrument, where available. A market is regarded as active if quoted prices are readily and regularly available and represent actual and regularly occurring market transactions on an arm's length basis. If a market for a financial instrument is not active, its fair value is established using a valuation technique.

The best evidence of the fair value of a financial instrument at initial recognition is the transaction price, i.e. the fair value of the consideration given or received, unless the fair value of the instrument is evidenced by comparison with other observable current market transactions in the same instrument, that is, without modification, or based on a valuation technique whose variables include only data from observable markets.

**(b) Fair value hierarchy**

The Board categorises fair value measurements using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The fair value hierarchy has the following levels:

- Level 1: unadjusted quoted prices in active markets for individual assets or liabilities.
- Level 2: valuation techniques on observable inputs either directly, that is, as prices, or indirectly, that is, derived from prices. This category includes instruments valued using quoted market prices in active markets for similar instruments; quoted prices for identical or similar instruments in markets that are considered less than active; or other valuation techniques where all significant inputs are directly or indirectly observable from market data.
- Level 3: valuation techniques using significant unobservable inputs. This category includes all instruments where the valuation technique includes inputs not based on observable data and unobservable inputs have a significant effect on the valuation of the instrument. This category includes instruments that are valued based on quoted prices for similar instruments where significant unobservable adjustments or assumptions are required to reflect differences between instruments.

Fair value measurements that use inputs of different hierarchy levels are categorised in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

Transfers between levels of the fair value hierarchy are deemed to have occurred on the date of the event or change in circumstances that caused the transfers.

### 2.13 Impairment of financial assets

*Policy applicable from 1 January 2018*

The Board recognises loss allowances for expected credit losses ("ECLs") on financial assets measured at amortised cost and debt investments measured at FVOCI.

Loss allowances are measured on either of the following bases:

- 12-month ECLs: these are ECLs that result from default events that are possible within the 12 months after the reporting date (or for a shorter period if the expected life of the instrument is less than 12 months); or
- Lifetime ECLs: these are ECLs that result from all possible default events over the expected life of a financial instrument

**Simplified approach**

The Board applies the simplified approach to provide for ECLs for debtors and other receivables. The simplified approach requires the loss allowance to be measured at an amount equal to lifetime ECLs.

**General approach**

The Board applies the general approach to provide for ECLs on all other financial assets. Under the general approach, the loss allowance is measured at an amount equal to 12-month ECLs at initial recognition.

At each reporting date, the Board assesses whether the credit risk of a financial instrument has increased significantly since initial recognition. When credit risk has increased significantly since initial recognition, loss allowance is measured at an amount equal to lifetime ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Board considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Board's historical experience and informed credit assessment and includes forward-looking information.

If credit risk has not increased significantly since initial recognition or if the credit quality of the financial instruments improves such that there is no longer a significant increase in credit risk since initial recognition, loss allowance is measured at an amount equal to 12-month ECLs.

The Board considers a financial asset to be in default when the borrower is unlikely to pay its credit obligations to the Board in full, without recourse by the Board to actions such as realising security (if any is held).

The maximum period considered when estimating ECLs is the maximum contractual period over which the Board is exposed to credit risk.

**Measurement of ECLs**

ECLs are probability-weighted estimates of credit losses. Credit losses are measured at the present value of all cash shortfalls (i.e. the difference between the cash flows due to the Board in accordance with the contract and the cash flows that the Board expects to receive).

**Credit impaired financial assets**

At each reporting date, the Board assesses whether financial assets carried at amortised cost and debt investments at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.



Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer; or
- the disappearance of an active market for a security because of financial difficulties.

**Presentation of allowance for ECLs in the statement of net assets**

Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of these assets. For debt investments at FVOCI, loss allowances are recognised in the statement of changes in fund balances.

**Write-off**

The gross carrying amount of a financial asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Board determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Board's procedures for recovery of amounts due.

*Policy applicable before 1 January 2018*

The Board assesses at the end of each reporting date whether there is any objective evidence that a financial asset is impaired. A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event has a negative effect on the estimated future cash flows of that asset that can be estimated reliably.

**(a) Financial assets carried at amortised cost: Loans and receivables, held-to-maturity financial assets**

The Board considers evidence of impairment for loans and receivables, and held-to-maturity financial assets at both the individual asset level and collectively. All individually significant loans and receivables, and held-to-maturity financial assets are assessed for specific impairment. All individually significant loans and receivables, and held-to-maturity financial assets found not to be specifically impaired are then collectively assessed for any impairment that has been incurred but not identified.

Loans and receivables and held-to-maturity financial assets that are not individually significant and not specifically impaired, are collectively assessed for impairment by grouping together loans and receivables, and held-to-maturity financial assets with similar credit risk characteristics.

Assets that are individually assessed for impairment and for which an impairment loss is, or continues to be recognised are not included in a collective assessment of impairment.

To determine whether there is objective evidence that an impairment loss on financial assets has been incurred, the Board considers factors such as the probability of insolvency or significant financial difficulties of the debtor and default or significant delay in payments.

In assessing collective impairment, the Board uses historical trends of the probability of default, the timing of recoveries and the amount of loss incurred, adjusted for the judgment made by management as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical trends.

If there is objective evidence that an impairment loss on a financial asset carried at amortised cost has been incurred, the amount of loss is measured as difference between the carrying amount of the financial asset and the present value of the estimated future cash flows discounted at the original effective interest rate of the financial asset. If a loan has a variable interest rate, the discount rate for measuring any impairment loss is the current effective interest rate.

Impairment losses on financial assets carried at amortised cost are recognised as an expense, and charge to an allowance account against the loans and receivables, or held-to-maturity financial assets. Interest on the impaired asset continues to be recognised. When the asset becomes uncollectible, the carrying amount of the impaired financial asset is reduced directly or if an amount was charged to the allowance account, the amounts charged to the allowance account are written off against the carrying value of the financial asset.

If in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the previously recognised impairment loss is reversed to the extent that the carrying amount of the asset does not exceed its amortised cost at the reversal date. The amount of reversal is recognised in the statement of changes in fund balances.

**(b) Available-for-sale financial assets**

In the case of equity securities classified as available-for-sale, objective evidence of impairment includes:

(i) significant financial difficulty of the issuer or obligor,
(ii) information about significant changes with an adverse effect that have taken place in the technological, market, economic or legal environment in which the issuer operates, and indicates that the cost of the investment in equity securities may not be recovered; and
(iii) a significant or prolonged decline in the fair value of the investment below its costs. "Significant" is to be evaluated against the original cost of the investment and "prolonged" against the period in which the fair value has been below its original cost.

If an available-for-sale financial asset is impaired, an amount comprising the difference between its acquisition cost, net of any principal repayment and amortisation, and its current fair value, less any impairment loss previously recognised in the statement of changes in fund balances, is transferred from fair value reserve and recognised in the statement of changes in fund balances. Reversals of impairment losses in respect of equity securities are not recognised in the statement of changes in fund balances; increase in their fair values after impairment are recognised directly in the fair value reserve.

In the case of debt securities classified as available-for-sale, impairment is assessed based on the same criteria as financial assets carried at amortised cost, as set out in note 2.13(a). However, the amount recorded for impairment is the cumulative loss measured as the difference between the amortised cost and the current fair value, less any impairment loss on that investment previously recognised in the statement of changes in fund balances. Future interest income continues to be accrued based on the reduced carrying amount of the asset, using the rate of interest used to discount the future cash flows for measuring the impairment loss. The interest income is recorded as part of income from investments in the statement of changes in fund balances. If, in a subsequent year, the fair value of a debt security increases and the increase can be objectively related to an event occurring after the impairment loss was recognised in the statement of changes in fund balances, the impairment loss is reversed in the statement of changes in fund balances.

### 2.14 Cash and cash equivalents

Cash and cash equivalents comprise cash at banks and bank deposits. Cash at banks managed by the Board on behalf of trust funds and Government ministries is excluded from cash and cash equivalents in the statement of cash flows.

### 2.15 Foreign currency transactions and balances

Transactions in foreign currencies are measured and are recorded on initial recognition in Singapore Dollars at exchange rates at the dates of the transactions. Monetary assets and monetary liabilities denominated in foreign currencies are translated to Singapore Dollars at the exchange rate at the end of the year.

Foreign currency exchange gains or losses on monetary items is the difference between the amortised costs of the monetary items, reported in Singapore Dollars, at the start of the year, adjusted for effective interest and payments during the year, and the amortised costs of the monetary items, translated from foreign currency to Singapore Dollars, at the exchange rate at the end of the year.

Exchange differences arising on the settlement of monetary items or on translating monetary items at the end of the year are recognised in the statement of changes in fund balances.

Non-monetary assets and non-monetary liabilities measured at fair value in foreign currencies are translated to Singapore Dollars using the exchange rates at the date when the fair value was measured. Non-monetary items that are measured in terms of historical cost in foreign currencies are translated using the exchange rates at the dates of the initial transactions.

### 2.16 Provisions

A provision is recognised when, as a result of a past event, the Board 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 that obligation. Provisions are estimated, based on the best estimate of the expenditure required to settle the obligations, taking into consideration the time value of money.

Provisions are reviewed at the end of each year and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of economic resources will be required to settle the obligation, the provision is reversed.

## 2.17 Employee benefits

**(a) Defined contribution plans**

Contributions on the salaries of the employees of the Board are made to the CPF as required by law. The CPF contributions are recognised as expenses in the period when the employees rendered their services.

**(b) Short-term employee benefits**

Short-term employee benefits obligations are measured on an undiscounted basis and are expensed as the related benefits are provided. A liability is recognised for the amount expected to be paid under short-term cash bonus if the Board has a present legal or constructive obligation to pay the amount as a result of past service rendered by the employee and the obligation can be reliably estimated.

**(c) Employees' leave entitlements**

Employees' entitlements to annual leave are recognised when they accrue to the employees. A liability is recognised for leave earned by the employees as a result of services rendered up to the reporting date.

## 2.18 Trust Funds

Trust Funds are funds to which the Board acts as trustee, administrator or agent but does not exercise control over the funds.

The assets and liabilities of these funds held in trust are presented as a line item at the bottom of the statement of net assets with additional disclosures in the notes to the financial statements (as set out in note 21), as prescribed by SB-FRS Guidance Note 3 *Accounting and Disclosures for Trust Funds.*

The receipts and disbursements relating to these funds are accounted for directly in these funds on a cash basis, in which funds received are accounted for when received, instead of when earned, and funds disbursed are accounted for when paid, instead of when incurred, and recognised in the statement of receipts and disbursements accordingly (as set out in notes 21.1 to 21.5).

## 2.19 Government grants

Government grants received for the purchase or the construction of depreciable assets are accounted for as deferred capital grant. Deferred capital grant is amortised and recognised as income over the respective useful life of the assets to match the annual depreciation charge of these assets. When the asset is disposed or written off, the remaining balance of the deferred grant not yet amortised will be credited to income.

Government grants received by the Board to meet operating expenses are recognised as income in the year these operating expenses are incurred.

## 2.20 Standards issued but not yet effective

The following standards and interpretations have been issued but are not yet effective for the reporting period ended 31 December 2018:

| Description | Effective for annual periods beginning on or after |
|---|---|
| SB-FRS 116 *Leases* | 1 January 2019 |
| Amendments to SB-FRS 109: *Prepayment Features with Negative Compensation* | 1 January 2019 |

The Board has assessed the estimated impact that initial application of SB-FRS 116 will have on the financial statements, which is as described below.

<u>SB-FRS 116 *Leases*</u>

SB-FRS 116 introduces a single, on-balance sheet lease accounting model for lessees. A lessee recognises a right-of-use (ROU) asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are recognition exemptions for short-term leases and leases of low-value items. Lessor accounting remains similar to the current standard – i.e. lessors continue to classify leases as finance or operating leases. SB-FRS 116 replaces existing lease accounting guidance, including SB-FRS 17 *Leases*, INT SB-FRS 15 *Operating Leases – Incentives* and INT SB-FRS 27 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*. The standard is effective for annual periods beginning on or after 1 January 2019, with early adoption permitted.

The Board plans to apply SB-FRS 116 initially on 1 January 2019, using the modified retrospective approach. Therefore, the cumulative effect of adopting SB-FRS 116 will be recognised as an adjustment to the opening balance of accumulated surplus at 1 January 2019, with no restatement of comparative information.

The Board has performed a preliminary impact assessment based on currently available information.

***i. The Board as lessee***

The Board expects to measure lease liabilities by applying a single discount rate to the portfolio of office building leases. Furthermore, the Board is likely to apply the practical expedient to recognise amounts of ROU assets equal to their lease liabilities, adjusted by the amount of related accrued lease payments, at 1 January 2019. For lease contracts that contain the option to renew, the Board is expected to use hindsight in determining the lease term.

As at 1 January 2019, the Board expects an increase in ROU assets of S$135,000,000 and an increase in lease liabilities of S$146,000,000.

The nature of expenses related to those leases will change as SB-FRS 116 replaces the straight-line operating lease expense with depreciation charge for ROU assets and interest expense on lease liabilities.

***ii. The Board as lessor***

SB-FRS 116 carries forward the existing lessor accounting requirements. Accordingly, the Board continues to classify its leases as operating leases and to account for these leases using the existing operating lease accounting model.

## 3. Property, plant and equipment

| Non-current assets | Leasehold land S$'000 | Buildings S$'000 | Building renovation and improvement S$'000 | Machinery and equipment S$'000 | Furniture and fittings S$'000 | Data processing equipment S$'000 | Construction-in-progress S$'000 | Total S$'000 |
|---|---|---|---|---|---|---|---|---|
| **Cost** | | | | | | | | |
| At 1 January 2017 | 62,741 | 74,278 | 3,548 | 35,196 | 12,794 | 34,414 | 1,207 | 224,178 |
| Additions | – | – | 634 | 3,093 | 111 | 11,687 | 4 | 15,529 |
| Disposals/Written off | – | – | – | (660) | (112) | (2,960) | – | (3,732) |
| Reclassification | – | – | – | 1,211 | – | – | (1,211) | – |
| At 31 December 2017 | 62,741 | 74,278 | 4,182 | 38,840 | 12,793 | 43,141 | – | 235,975 |
| Additions | – | – | 3,202 | 44 | 392 | 24,418 | 1,219 | 29,275 |
| Disposals/Written off | – | – | – | (165) | (49) | (5,975) | – | (6,189) |
| Reclassification | – | – | – | 732 | – | – | (732) | – |
| **At 31 December 2018** | **62,741** | **74,278** | **7,384** | **39,451** | **13,136** | **61,584** | **487** | **259,061** |
| **Accumulated depreciation** | | | | | | | | |
| At 1 January 2017 | 8,686 | 18,227 | 907 | 24,274 | 2,256 | 18,386 | – | 72,736 |
| Depreciation for the year | 713 | 1,985 | 103 | 2,284 | 1,602 | 6,570 | – | 13,257 |
| Disposals/Written off | – | – | – | (634) | (86) | (2,944) | – | (3,664) |
| At 31 December 2017 | 9,399 | 20,212 | 1,010 | 25,924 | 3,772 | 22,012 | – | 82,329 |
| Depreciation for the year | 712 | 1,986 | 183 | 2,410 | 1,560 | 9,054 | – | 15,905 |
| Disposals/Written off | – | – | – | (146) | (46) | (5,915) | – | (6,107) |
| **At 31 December 2018** | **10,111** | **22,198** | **1,193** | **28,188** | **5,286** | **25,151** | **–** | **92,127** |
| **Carrying amounts** | | | | | | | | |
| At 1 January 2017 | 54,055 | 56,051 | 2,641 | 10,922 | 10,538 | 16,028 | 1,207 | 151,442 |
| At 31 December 2017 | 53,342 | 54,066 | 3,172 | 12,916 | 9,021 | 21,129 | – | 153,646 |
| **At 31 December 2018** | **52,630** | **52,080** | **6,191** | **11,263** | **7,850** | **36,433** | **487** | **166,934** |

Depreciation charges amounting to S$173,000 (2017: S$127,000) and S$Nil (2017: S$1,000) were allocated to Home Protection Fund and MediShield Life Fund respectively. The remaining depreciation charge of S$15,732,000 (2017: S$13,129,000) was accounted for under the Central Provident Fund.



## 4. Intangible assets

| Non-current assets | Computer software/ application system S$'000 | Computer software/ application system under development S$'000 | Total S$'000 |
|---|---|---|---|
| **Cost** | | | |
| At 1 January 2017 | 85,026 | 1,240 | 86,266 |
| Additions | 4,994 | 15,240 | 20,234 |
| Disposals/Written off | (554) | – | (554) |
| Transfer | 313 | (313) | – |
| At 31 December 2017 | 89,779 | 16,167 | 105,946 |
| Additions | 26,893 | 4,555 | 31,448 |
| Disposals/Written off | (16,473) | – | (16,473) |
| Transfer | 16,968 | (16,968) | – |
| **At 31 December 2018** | **117,167** | **3,754** | **120,921** |
| **Accumulated amortisation** | | | |
| At 1 January 2017 | 50,393 | – | 50,393 |
| Amortisation charge for the year | 11,567 | – | 11,567 |
| Disposals/Written off | (522) | – | (522) |
| At 31 December 2017 | 61,438 | – | 61,438 |
| Amortisation charge for the year | 17,046 | – | 17,046 |
| Disposals/Written off | (16,416) | – | (16,416) |
| **At 31 December 2018** | **62,068** | **–** | **62,068** |
| **Carrying amounts** | | | |
| At 1 January 2017 | 34,633 | 1,240 | 35,873 |
| At 31 December 2017 | 28,341 | 16,167 | 44,508 |
| **At 31 December 2018** | **55,099** | **3,754** | **58,853** |

Amortisation charges amounting to S$4,000 (2017: S$4,000) were allocated to MediShield Life Fund. The remaining amortisation charge of S$17,042,000 (2017: S$11,563,000) was accounted for under the Central Provident Fund.

## 5. Investments

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| **Held-to-maturity financial assets** | | | |
| Special issues of Singapore Government securities: | | | |
| - Floating rate | (a) | – | 295,300,723 |
| - Fixed rate | (b) | – | 49,043,606 |
| | | – | 344,344,329 |
| Advance deposits | (c) | – | 11,545,646 |
| | | – | 355,889,975 |
| **Available-for-sale financial assets** | | | |
| Singapore Government securities | | – | 490,363 |
| Statutory Board bonds | | – | 259,174 |
| Corporate bonds | | – | 1,516,311 |
| | | – | 2,265,848 |
| Equity securities | | – | 653,523 |
| | | – | 2,919,371 |
| **Financial assets at amortised cost** | | | |
| Special issues of Singapore Government securities: | | | |
| - Floating rate | (a) | 317,460,017 | – |
| - Fixed rate | (b) | 57,302,284 | – |
| | | 374,762,301 | – |
| Advance deposits | (c) | 12,402,549 | – |
| | | 387,164,850 | – |
| **Debt investments at FVOCI** | | | |
| Singapore Government securities | | 475,841 | – |
| Statutory Board bonds | | 261,118 | – |
| Corporate bonds | | 1,422,956 | – |
| | | 2,159,915 | – |
| **Debt investments at FVTPL** | | | |
| Corporate bonds | | 130,405 | – |
| **Equity investments at FVOCI** | (d) | 607,354 | – |
| | | **390,062,524** | **358,809,346** |

(a) The floating rate special issues of Singapore Government securities are bonds issued specifically to the Board to meet its interest and other obligations. They do not have quoted market values and the Board cannot trade them in the market. The interest rates of 2.50%, 3.50%, 4.00%, 4.50%, 5.00% and 6.00% (2017: 2.50%, 3.50%, 4.00%, 4.50%, 5.00% and 6.00%) per annum for the securities are pegged to the rates at which the Board pays interest to the members of CPF. The effective interest rates for the securities approximate the interest rates quoted above.

(b) The CPF invested jointly with the Lifelong Income Fund in fixed rate special issues of Singapore Government securities, which are issued specifically to the Board to meet its interest and other obligations for Retirement Accounts of members. The effective interest rate on these securities is within the range of 4.00% to 6.00% (2017: 4.00% to 6.00%) per annum.

(c) The advance deposits are deposits placed with the Accountant-General through the Monetary Authority of Singapore to purchase special issues of Singapore Government securities. The interest rate of 2.50% (2017: 2.50%) per annum on the advance deposits is pegged to the rate at which the Board pays interest for the Ordinary Accounts of members.

(d) Equity investments designated as FVOCI
At 1 January 2018, the Board designated the equity investments shown below as FVOCI because these equity investments are intended to be held for long-term for strategic purposes. In 2017, these investments were classified as available-for-sale.

| Equity investments held as at 31 December 2018 | Fair value at 31 December 2018 S$'000 | Dividend income recognised during 2018 S$'000 |
|---|---|---|
| Preference shares | 316,130 | 8,594 |
| Singapore Real Estate Investment Trust (S-REIT) | 291,224 | 14,960 |
| | 607,354 | 23,554 |

Equity investments with the fair value of S$188,362,000 were disposed of during the year. Relating to these equity investments, dividend income of S$4,031,000 was recognised. This is to keep the investments within the portfolio guidelines, as well as to participate in better investment opportunities. There is a transfer of cumulative loss of S$3,219,000 from fair value reserves to accumulated surplus on disposal.

## 6. Debtors and other receivables

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| Debtors – schemes | (a) | 16,311 | 28,515 |
| Interest receivable | | | |
| - special issues of Singapore Government securities and advance deposits | | 4,179,212 | 3,785,282 |
| - other investments | | 22,463 | 22,466 |
| Deposits paid | | 6,007 | 5,535 |
| Prepayments | | 4,429 | 4,252 |
| Other receivables | | 31,419 | 19,480 |
| | | **4,259,841** | **3,865,530** |

(a) Debtors – schemes include all receivable amounts linked to the various CPF schemes.

At the reporting date, the debtors and other receivables are not past due and are usually settled within 6 months from the date of invoice.

As at 31 December 2018, the Board assessed that no impairment allowance is required for debtors and other receivables as these are mainly due from Government ministries.

## 7. Cash and cash equivalents

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| Cash at banks | | 319,690 | 219,714 |
| Bank deposits | | 84,000 | 90,000 |
| **Cash and cash equivalents** | | 403,690 | 309,714 |
| Less: Cash at banks managed by the Board on behalf of trust funds and Government ministries | 21.5 | (142,370) | (78,832) |
| **Cash and cash equivalents in the statement of cash flows** | | **261,320** | **230,882** |

## 8. Deferred capital grant

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| At 1 January | | 6,253 | 8,923 |
| Received/receivable during the year | | – | – |
| Amortisation charge for the year | 13(b) | (2,746) | (2,670) |
| **At 31 December** | | **3,507** | **6,253** |
| Current | | 2,746 | 2,670 |
| Non-current | | 761 | 3,583 |
| | | **3,507** | **6,253** |

Deferred capital grant is provided by the Government to enhance the application system for the MediShield Life Scheme. There are no unfulfilled conditions or contingencies attached to this grant.

## 9. Creditors, accruals and provisions

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| Amount due to trust funds and Government ministries for cash at banks managed on behalf by the Board | 7 | 142,370 | 78,832 |
| Creditors – schemes | (a) | 328,008 | 245,242 |
| Security, renovation and rental deposits received | | 2,107 | 2,279 |
| Accrued expenses | | 26,143 | 20,337 |
| Provisions | (b) | 65,289 | 63,357 |
| Other payables | | 57,076 | 31,620 |
| | | **620,993** | **441,667** |

(a) Creditors - schemes include all payable amounts linked to the various CPF schemes.

(b) Provisions include provision on potential claims of S$9,648,000 (2017: S$9,678,000), and provision on administration and operating expenses of S$3,380,000 (2017: S$3,515,000) transferred from the dissolved Dependants' Protection Residual Fund to meet future liabilities and expenditure before the Dependents' Protection Residual Fund was dissolved in December 2013. Payments on claims are made as and when it is received by the Board.

Creditors and other payables are usually paid within 6 months from the date of invoice.

**10. Contributions (net of refunds) by members**

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| Contributions credited in the year | | 36,254,303 | 35,153,630 |
| Less: Refund of contributions: | | | |
| - Refunds of excess contributions on additional wages | (a) | (19,231) | (26,578) |
| - Refunds to self-employed persons | (b) | (2,218) | (2,396) |
| - Other refunds | (c) | (18,535) | (27,657) |
| | | **36,214,319** | **35,096,999** |

(a) Refunds of excess contributions on additional wages refer to refunds made under section 75 of the CPF Act (Chapter 36, Revised Edition 2013).

(b) Refunds to self-employed person refer mainly to refunds made under section 75C of the CPF Act (Chapter 36, Revised Edition 2013) for excess contributions to self-employed persons and refunds under section 75D of the CPF Act (Chapter 36, Revised Edition 2013) read with Regulation 4(1)(a)(i) of the CPF (Voluntary Contributions) Regulations 2011 for excess voluntary contributions paid by self-employed persons.

(c) Other refunds refer mainly to refunds under section 74 of the CPF Act (Chapter 36, Revised Edition 2013) for contributions paid in error and refunds (other than refunds to self-employed persons) made under section 75D of the CPF Act (Chapter 36, Revised Edition 2013) for excess voluntary contributions paid.

**11. Government grants to members**

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| CPF Housing Grant Scheme | | 821,123 | 779,725 |
| Home Ownership Plus Education Scheme | | 2,761 | 2,341 |
| MediSave Top-Up Schemes | (a) | 385,732 | 387,595 |
| Workfare Income Supplement Scheme | | 407,904 | 466,489 |
| Deferment Bonus | | 15,726 | 26,527 |
| CPF LIFE Bonus | | 10 | 17,687 |
| National Service Housing, Medical and Education Award | | 210,952 | 219,577 |
| MediSave Grant for Newborns | | 138,105 | 138,433 |
| | | **1,982,313** | **2,038,374** |

(a) MediSave Top-Up Schemes include grants under the MediSave Top-ups and MediSave Top-up for Pioneer Generation.

**12. Net income from investments**

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| Interest income from held-to-maturity investments: | | |
| - Special issues of Singapore Government securities | – | 13,193,049 |
| - Advance deposits | – | 162,751 |
| | – | 13,355,800 |
| Net income from available-for-sale investments: | | |
| Interest income from available-for-sale investments: | | |
| - Singapore Government securities | – | 15,135 |
| - Statutory Board bonds | – | 8,992 |
| - Corporate bonds | – | 49,733 |
| | – | 73,860 |
| Net loss on disposal of available-for-sale investments | – | (4,175) |
| Dividend income | – | 32,024 |
| | – | 101,709 |
| Interest income from investments at amortised cost: | | |
| - Special issues of Singapore Government securities | 14,347,306 | – |
| - Advance deposits | 175,933 | – |
| | 14,523,239 | – |
| Interest income from debt investments at FVOCI: | | |
| - Singapore Government securities | 14,437 | – |
| - Statutory Board bonds | 8,989 | – |
| - Corporate bonds | 48,396 | – |
| | 71,822 | – |
| Interest income from debt investments at FVTPL: | | |
| - Corporate bonds | 6,039 | – |
| Dividend income from equity investments at FVOCI | 27,585 | – |
| Net loss on disposal of: | | |
| - debt investments at FVOCI | (7,986) | – |
| - equity investments at FVOCI | (3,219) | – |
| | (11,205) | – |
| Net change in fair value of debt investments at FVTPL | (4,254) | – |
| | **14,613,226** | **13,457,509** |

## 13. Other operating income

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| Agency, consultancy and data processing fees | | 129,710 | 120,858 |
| Penalty interest on late contributions | | 17,381 | 23,780 |
| Rent, service charges and car park receipts | (a) | 9,624 | 9,810 |
| Government grants | (b) | 2,748 | 2,670 |
| Miscellaneous revenue | | 9,550 | 8,526 |
| | | **169,013** | **165,644** |

(a) Rental income is derived from the leasing of space in buildings under property, plant and equipment. Such leases are generally for a 3 year term. Shorter leases are also granted.

At the reporting date, future minimum lease receivables under non-cancellable operating leases are as follows:

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| Receivable | | |
| - not later than one year | 7,173 | 8,900 |
| - later than one year and not later than five years | 10,060 | 13,928 |
| - later than five years | – | 995 |
| | 17,233 | 23,823 |

(b)

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| Amortisation of deferred capital grant | 8 | 2,746 | 2,670 |
| Operating grant | | 2 | – |
| | | 2,748 | 2,670 |

Operating grant is received from the Government to fully defray the start-up costs incurred to facilitate the administration of the CareShield Life Scheme.



## 14. Withdrawals (net of refunds) by members

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| Sections 15 and 25 of CPF Act | (a) | 7,504,819 | 5,840,902 |
| Amount restored from general moneys of the Fund | (b) | 7 | 23 |
| Approved Housing Schemes | (c) | 6,218,566 | 7,375,210 |
| Home Protection Insurance Scheme | (c) | 131,588 | 139,228 |
| Residential Properties Scheme | (c) | 2,841,278 | 3,716,873 |
| MediSave Scheme | (c) | 1,033,783 | 963,498 |
| Retirement Sum Scheme | (c) | 771,777 | 649,751 |
| Dependants' Protection Insurance Scheme | (c) | 199,715 | 201,030 |
| Education Scheme | (c) | 49,451 | 45,565 |
| MediShield Life Scheme | (c) | 1,235,905 | 1,098,934 |
| Private Medical Insurance Scheme | (c) | 828,226 | 768,811 |
| ElderShield Scheme | (c) | 391,595 | 369,290 |
| Lifelong Income Scheme | (c) | 344,039 | 339,715 |
| Non-residential Properties Scheme | (c) | (17,175) | (12,847) |
| Investment Schemes | (c) | (399,015) | (1,608,502) |
| Special Discounted Shares Scheme | | (21,806) | (27,645) |
| | | **21,112,753** | **19,859,836** |

(a) Withdrawals under sections 15 and 25 of the CPF Act (Chapter 36, Revised Edition 2013) mainly refer to withdrawals by members who have attained the age of 55 years and by members who have left or are about to leave Singapore and West Malaysia permanently, as well as on grounds of death.

(b) The amount restored and paid out from general moneys of the Fund refers to the amount restored to members' CPF subsidiary accounts and subsequently paid out to members/ other persons entitled to the moneys (e.g. members' nominees) upon application made under the CPF Act.

(c) The details and operations of the schemes are disclosed in the CPF Act, MediShield Life Scheme Act 2015 and all related subsidiary legislation.

## 15. General and administrative expense

Included in general and administrative expense is the following items:

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| Rental expense for building and equipment | 26,409 | 26,763 |

## 16. Other operating expenses

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| Salaries and staff benefits | (a) | 239,641 | 222,639 |
| Computer software and supplies | | 45,087 | 40,948 |
| Depreciation and amortisation | | 32,774 | 24,692 |
| Maintenance of buildings and equipment | | 14,906 | 10,116 |
| Professional and other charges | | 11,467 | 12,303 |
| Publicity and campaigns | | 10,264 | 9,993 |
| Printing and postage | | 4,202 | 4,340 |
| Public utilities | | 2,103 | 1,973 |
| Property tax | | 1,232 | 794 |
| | | 361,676 | 327,798 |

(a) Included in salaries and staff benefits are the following items:

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| Employer's CPF contributions | 30,435 | 28,647 |
| Staff welfare and training | 5,084 | 4,783 |
| Allowances for members of the Board | 321 | 321 |



## 17. Movements in net assets of the Central Provident Fund

| | Note | Members' accounts S$'000 | General moneys of the Fund S$'000 | Accumulated surplus S$'000 | Fair value reserve S$'000 | Total S$'000 |
|---|---|---|---|---|---|---|
| At 1 January 2017 | | 328,895,282 | 53,089 | 2,978,119 | 15,534 | 331,942,024 |
| Contribution (net of refunds) by members | 10 | 35,096,999 | – | – | – | 35,096,999 |
| Government grants to members | 11 | 2,038,374 | – | – | – | 2,038,374 |
| Dividends from Special Discounted Shares | | 149,344 | – | – | – | 149,344 |
| Net income from investments | 12 | – | – | 13,457,509 | – | 13,457,509 |
| Transferred to statement of changes in fund balances on disposal of available-for-sale financial assets | | – | – | – | (3,964) | (3,964) |
| Change in fair value of available-for-sale financial assets | (a) | – | – | – | 100,726 | 100,726 |
| Interest income from bank deposits | | – | – | 3,121 | – | 3,121 |
| Other operating income | 13 | – | – | 165,644 | – | 165,644 |
| Withdrawals (net of refunds) by members | 14 | (19,859,836) | – | – | – | (19,859,836) |
| General and administrative expense | | – | – | (27,319) | – | (27,319) |
| Other operating expenses | 16 | – | – | (327,798) | – | (327,798) |
| Interest credited to members | | 13,196,184 | – | (13,196,184) | – | – |
| Transferred to general moneys of the Fund | | (1,766) | 1,766 | – | – | – |
| **At 31 December 2017** | | **359,514,581** | **54,855** | **3,053,092** | **112,296** | **362,734,824** |

(a) Change in fair value of available-for-sale financial assets is unrealised, recognised in the statement of changes in fund balances and presented in the fair value reserve.

| | Note | Members' accounts S$'000 | General moneys of the Fund S$'000 | Accumulated surplus S$'000 | Fair value reserve S$'000 | Total S$'000 |
|---|---|---|---|---|---|---|
| At 1 January 2018 | | 359,514,581 | 54,855 | 3,053,092 | 112,296 | 362,734,824 |
| Adjustment on initial application of SB-FRS 109 | 23 | – | – | 3,471 | (3,471) | – |
| Adjusted balance at 1 January 2018 | | 359,514,581 | 54,855 | 3,056,563 | 108,825 | 362,734,824 |
| Contribution (net of refunds) by members | 10 | 36,214,319 | – | – | – | 36,214,319 |
| Government grants to members | 11 | 1,982,313 | – | – | – | 1,982,313 |
| Dividends from Special Discounted Shares | | 172,361 | – | – | – | 172,361 |
| Net income from investments | 12 | – | – | 14,613,226 | – | 14,613,226 |
| Transferred to statement of changes in fund balances on disposal of debt investments at FVOCI | | – | – | – | (7,970) | (7,970) |
| Change in fair value | | | | | | |
| - equity investments at FVOCI | | – | – | – | (18,030) | (18,030) |
| - debt investments at FVOCI | | – | – | – | (34,395) | (34,395) |
| Interest income from bank deposits | | – | – | 3,983 | – | 3,983 |
| Other operating income | 13 | – | – | 169,013 | – | 169,013 |
| Withdrawals (net of refunds) by members | 14 | (21,112,753) | – | – | – | (21,112,753) |
| General and administrative expense | | – | – | (27,873) | – | (27,873) |
| Other operating expenses | 16 | – | – | (361,676) | – | (361,676) |
| Interest credited to members | | 14,350,208 | – | (14,350,208) | – | – |
| Transferred to general moneys of the Fund | | (3,512) | 3,512 | – | – | – |
| **At 31 December 2018** | | **391,117,517** | **58,367** | **3,103,028** | **48,430** | **394,327,342** |



**Members' accounts**

Members' accounts refer to moneys of the Fund standing to the members' credit, that are accounted for in subsidiary accounts, which are specifically designated and maintained for members, for any purposes of the CPF Act.

**General moneys of the Fund**

The Reserve Account of the Fund is set up under the CPF Regulations (Rg 15, Revised Edition 1998). With the amendment to CPF Act and related subsidiary legislation which took effect from 1 January 2011, Reserve Account of the Fund is currently known as the general moneys of the Fund, pursuant to section 2(1) of the CPF Act.

All unclaimed moneys which satisfy the conditions stipulated under the CPF Act and CPF Regulations were transferred from members' balances to this account. The balance in this account is refundable to members or their nominees upon application made under the relevant legislation.

**Accumulated surplus**

Accumulated surplus comprises the cumulative excess of fund flows into and out of the Fund. It includes a sum that the Board has set aside, by way of a legally binding arrangement, for the modernisation of the Board's IT systems. In accordance with the treatment of accumulated surplus for statutory boards listed under the Fifth Schedule of the Constitution, the earmarked sum does not form part of CPF Board's past reserves to be protected.

**Fair value reserve**

The fair value reserve comprises the cumulative net change in the fair value of financial assets held until the financial assets are impaired or derecognised. These financial assets refer to available-for-sale financial assets in 2017, and equity and debt investments at FVOCI in 2018.

## 18. Commitments

**(i) Capital commitments**

Capital expenditure approved by the Board but not provided for in the financial statements is as follows:

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| Amount approved and contracted for | 69,477 | 27,511 |
| Amount approved but not contracted for | 90,974 | 78,267 |
| | **160,451** | **105,778** |

**(ii) Operating lease commitments – as lessee**

The Board leases commercial properties and equipments under non-cancellable operating lease agreements. The leases have varying terms, escalation clauses and renewal rights.

At the reporting date, future minimum lease payables under non-cancellable operating leases contracted are as follows:

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| Not later than one year | 25,402 | 26,382 |
| Later than one year but not later than five years | 99,380 | 100,450 |
| Later than five years | 43,534 | 68,240 |
| | **168,316** | **195,072** |

## 19. Financial risk management of the CPF

**Overview**

Risk management is integral to the operation of the CPF managed by the Board. The Board has a system of controls in place to create an acceptable balance between the cost of risks occurring and the cost of managing the risks. The Board continually monitors the risk management process of CPF to ensure that an appropriate balance between risk and control is achieved. Risk management policies and processes are reviewed regularly to reflect changes in market conditions and the activities of the fund.

**Market risk**

Market risk refers to changes in market prices that will affect the income of CPF or the value of its holdings of financial instruments. Market risk comprises risks arising from changes in interest rates, equity prices and foreign exchange rates. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimising the return on risk.

**Equity price risk**

Sensitivity analysis

The analysis below is performed for reasonably possible movements in equity prices with all other variables remaining constant.

| | Impact on fund balance | |
|---|---|---|
| | 2018 S$'000 | 2017 S$'000 |
| **Change in variable** | | |
| **Equity prices** | | |
| +10% | 60,735 | 65,352 |
| -10% | (60,735) | (65,352) |

**Interest rate risk**

The CPF is exposed to interest rate risk as a result of investments in debt securities and interest payable on members' accounts placed with the CPF. In the management of the interest rate risk of the CPF, the interest rates of the investments in special issues of Singapore Government securities and advance deposits are pegged to the rates at which the Board pays interest to its members. These interest rates are affected by changes in the market interest rates and reset every quarter. The fixed interest rate which is issued for the Lifelong Income Fund and Retirement Accounts of members is also affected by changes in the market interest rates and reset yearly. The Ordinary Account of members is subject to an interest rate floor of 2.50% per annum, while the Special Account, MediSave Account and Retirement Account ("SMRA") are subject to an interest rate floor of 4.00% per annum. All other investments are in fixed rate debt securities such as Singapore Government securities and statutory board bonds, and the interest rate risks are mitigated by diversifying the portfolio to include high quality credits as well as managing portfolio duration.

Sensitivity analysis

The analysis below is performed for reasonably possible movements in interest rate with all other variables remaining constant.

| | Impact on fund balance | |
|---|---|---|
| | 2018 S$'000 | 2017 S$'000 |
| **Change in variable** | | |
| **Interest rate** | | |
| +50bps | (53,366) | (57,139) |
| -50bps | 54,811 | 58,842 |

The interest rates, carrying amounts and maturities of the financial assets are shown in the following table.

| | Interest rate (per annum) | | Years to maturity: Not later than one year | | Later than one year and not later than five years | | Later than five years | |
|---|---|---|---|---|---|---|---|---|
| | 2018 % | 2017 % | 2018 S$'000 | 2017 S$'000 | 2018 S$'000 | 2017 S$'000 | 2018 S$'000 | 2017 S$'000 |
| Special issues of Singapore Government securities | 2.50 – 6.00 | 2.50 – 6.00 | 16,827,682 | 16,796,482 | 67,310,728 | 67,185,928 | 290,623,891 | 260,361,919 |
| Advance deposits | 2.50 | 2.50 | 12,402,549 | 11,545,646 | – | – | – | – |
| Singapore Government securities | 3.00 – 3.50 | 3.00 – 4.00 | 42,324 | 49,841 | 308,871 | 314,612 | 124,646 | 125,910 |
| Statutory Board bonds | 2.42 – 3.95 | 3.14 – 3.95 | 38,196 | 26,379 | 182,528 | 49,826 | 40,394 | 182,969 |
| Corporate bonds | 2.80 – 4.75 | 2.50 – 5.25 | 27,296 | 26,102 | 225,704 | 154,606 | 1,300,361 | 1,335,603 |
| Cash and cash equivalents | 0.00 – 2.25 | 0.00 –1.39 | 403,690 | 309,714 | – | – | – | – |
| | | | **29,741,737** | **28,754,164** | **68,027,831** | **67,704,972** | **292,089,292** | **262,006,401** |



**Foreign currency risk**

The monetary assets and monetary liabilities of the CPF are denominated primarily in Singapore Dollars. Accordingly, CPF does not have any significant foreign currency risk exposure as at the reporting date.

**Liquidity risk**

A maturity analysis for financial assets of the fund that shows the remaining contractual maturities is shown in the table under interest rate risk. These financial assets can be readily sold or redeemed when the need arises.

In addition, management monitors and maintains adequate bank balances to finance its operations and mitigate the effects of fluctuations in cash flows.

**Credit risk**

The maximum credit risk exposure at the end of the year, in relation to each class of financial assets, is the carrying amount of those assets at the reporting date. The Board does not hold collateral in respect of its financial assets.

The Board has performed an analysis on the credit risk exposure of each class of financial assets based on 12 months probabilities of default published by Bloomberg and assessed that no impairment loss was required to be recognised.

The CPF is exposed mainly to sovereign risk, as most of the investments are in non trade-able special issues of Singapore Government securities, and majority of receivable balances at the reporting date is made up of interest receivable arising from the special issues of Singapore Government securities.

Other than investments in special issues of Singapore Government securities, the CPF is also exposed to credit risk that arises from bank deposits, investments in fixed deposits and debt securities. Financial loss may materialise should the issuer default on the debt securities. Those financial assets have low credit risk as the financial assets are rated AAA to BBB based on internal and external credit ratings of counterparties.

Cash and fixed deposits are placed with banks and financial institutions which are regulated by the Monetary Authority of Singapore which are rated Aa1 to A1, based on Moody's ratings.

The Board manages credit risk actively through the setting of minimum credit rating requirements and investment limits for issuers within the approved investment guidelines. These limits are reviewed regularly with ongoing monitoring and reporting undertaken at various levels.

| | AAA* S$'m | AA* S$'m | A* S$'m | BBB* S$'m | Not rated ** S$'m | Total S$'m |
|---|---|---|---|---|---|---|
| **2018** | | | | | | |
| Special issues of Singapore Government securities | – | – | – | – | 374,762 | 374,762 |
| Advance deposits | – | – | – | – | 12,403 | 12,403 |
| Singapore Government securities | 476 | – | – | – | – | 476 |
| Statutory Board bonds | 12 | – | – | – | 249*** | 261 |
| Corporate bonds | 148 | 40 | 320 | 260 | 785*** | 1,553 |
| | **636** | **40** | **320** | **260** | **388,199** | **389,455** |
| **2017** | | | | | | |
| Special issues of Singapore Government securities | – | – | – | – | 344,344 | 344,344 |
| Advance deposits | – | – | – | – | 11,546 | 11,546 |
| Singapore Government securities | 490 | – | – | – | – | 490 |
| Statutory Board bonds | – | – | – | – | 259*** | 259 |
| Corporate bonds | 153 | 4 | 310 | 224 | 825*** | 1,516 |
| | **643** | **4** | **310** | **224** | **356,974** | **358,155** |

* Based on public bond credit ratings assigned by external credit rating agencies Standard & Poor's, Moody's and Fitch.

** No rating was performed by external credit rating agencies.

*** Based on internal bond credit ratings, and holdings are rated equivalent to Standard & Poor's bond credit ratings of "AAA to BBB".

**19.1 Fair value of assets and liabilities**

**(a) Assets carried at fair value**

Financial assets carried at fair value comprise equity investments at FVOCI, debt investments at FVOCI and FVTPL in 2018 and available-for-sale financial assets in 2017. These investments are quoted and classified under Level 1 and Level 2 in the fair value hierarchy (note 2.12(b)).

**(b) Financial assets and financial liabilities that are not carried at fair value, and whose carrying amounts are reasonable approximates of their fair values**

The carrying amount of advance deposits is estimated to approximate their fair value at the end of the year because of their short-term nature.

The carrying amount of special issues of Singapore Government securities approximate their fair value at the end of the year due to the investment arrangements made with the Singapore Government.

The carrying amounts of other financial assets and financial liabilities, including cash and cash equivalents, debtors and other receivables, creditors, accruals and provisions are estimated to approximate their fair values at the end of the year because of their short periods of maturities.

Although the Board assessed that its estimates of fair value are appropriate, the use of different methodologies or assumptions could lead to different measurements of fair value. The fair value of assets and liabilities, together with the carrying amounts shown in the statement of net assets of funds, are as follows:

| | Note | At fair value | | At amortised cost | | | |
|---|---|---|---|---|---|---|---|
| | | FVTPL S$'000 | FVOCI S$'000 | Amortised cost S$'000 | Other financial liabilities S$'000 | Total carrying amount S$'000 | Year end fair value estimate S$'000 |
| **31 December 2018** | | | | | | | |
| Investments | | | | | | | |
| - Special issues of Singapore Government securities | 5 | – | – | 374,762,301 | – | 374,762,301 | 374,762,301 |
| - Advance deposits | 5 | – | – | 12,402,549 | – | 12,402,549 | 12,402,549 |
| - Debt securities | 5 | 130,405 | 2,159,915 | – | – | 2,290,320 | 2,290,320 |
| - Equity securities | 5 | – | 607,354 | – | – | 607,354 | 607,354 |
| Debtors and other receivables* | | – | – | 4,255,412 | – | 4,255,412 | 4,255,412 |
| Cash and cash equivalents | 7 | – | – | 403,690 | – | 403,690 | 403,690 |
| | | **130,405** | **2,767,269** | **391,823,952** | **–** | **394,721,626** | **394,721,626** |
| Creditors, accruals and provisions | 9 | – | – | – | **(620,993)** | **(620,993)** | **(620,993)** |

*excludes prepayment

| | Note | At fair value | At amortised cost | | | | |
|---|---|---|---|---|---|---|---|
| | | Available-for-sale S$'000 | Held-to-maturity S$'000 | Loans and receivables S$'000 | Other financial liabilities S$'000 | Total carrying amount S$'000 | Year end fair value estimate S$'000 |
| **31 December 2017** | | | | | | | |
| **Investments** | | | | | | | |
| **Held-to-maturity financial assets** | | | | | | | |
| Special issues of Singapore Government securities | 5 | – | 344,344,329 | – | – | 344,344,329 | 344,344,329 |
| Advance deposits | 5 | – | 11,545,646 | – | – | 11,545,646 | 11,545,646 |
| **Available-for-sale financial assets** | | | | | | | |
| Debt securities | 5 | 2,265,848 | – | – | – | 2,265,848 | 2,265,848 |
| Equity securities | 5 | 653,523 | – | – | – | 653,523 | 653,523 |
| **Loans and receivables** | | | | | | | |
| Debtors and other receivables* | | – | – | 3,861,278 | – | 3,861,278 | 3,861,278 |
| Cash and cash equivalents | 7 | – | – | 309,714 | – | 309,714 | 309,714 |
| | | **2,919,371** | **355,889,975** | **4,170,992** | **–** | **362,980,338** | **362,980,338** |
| **Creditors, accruals and provisions** | 9 | – | – | – | **(441,667)** | **(441,667)** | **(441,667)** |

*excludes prepayment

**Assets and liabilities measured at fair value**

The following table shows an analysis of each class of assets and liabilities measured at fair value at the end of the year.

| | Note | Fair value measurements at the end of the year Level 1 S$'000 | Level 2 S$'000 | Level 3 S$'000 | Total S$'000 |
|---|---|---|---|---|---|
| **Central Provident Fund** | | | | | |
| **Assets measured at fair value** | | | | | |
| **2018** | | | | | |
| Debt investments at FVOCI | 5 | 475,841 | 1,684,074 | – | 2,159,915 |
| Debt investments at FVTPL | 5 | – | 130,405 | – | 130,405 |
| Equity investments at FVOCI | 5 | 607,354 | – | – | 607,354 |
| Total financial assets | | **1,083,195** | **1,814,479** | **–** | **2,897,674** |
| **2017** | | | | | |
| **Available-for-sale financial assets** | | | | | |
| Equity securities | 5 | 653,523 | – | – | 653,523 |
| Debt securities | 5 | 490,363 | 1,775,485 | – | 2,265,848 |
| Total available-for-sale financial assets | | **1,143,886** | **1,775,485** | **–** | **2,919,371** |

**Level 2 fair value measurements**

The following is a description of the valuation techniques and inputs used in the fair value measurement for assets that are categorised within Level 2 of the fair value hierarchy:

Debt securities

Debt securities are valued using the Bloomberg Fair Value Model based on comparable bonds with similar characteristics i.e. currency, market type, industry type and credit rating.



**20. Statements of net assets of Insurance Funds**

| | Note | Home Protection Fund 2018 S$'000 | Home Protection Fund 2017 S$'000 | MediShield Life Fund 2018 S$'000 | MediShield Life Fund 2017 S$'000 | Lifelong Income Fund 2018 S$'000 | Lifelong Income Fund 2017 S$'000 |
|---|---|---|---|---|---|---|---|
| **Total assets** | | | | | | | |
| Investments | 20.3 | 1,319,818 | 1,307,608 | 6,886,500 | 5,716,000 | 10,606,875 | 10,125,795 |
| Premium and other receivables | 20.4 | 13,313 | 18,124 | 134,032 | 113,150 | – | – |
| Interest receivables | | 6,569 | 6,955 | 80,391 | 66,671 | 158,950 | 150,699 |
| Cash and cash equivalents | 20.5 | 187,593 | 180,672 | 53,936 | 33,170 | 10 | 10 |
| | | 1,527,293 | 1,513,359 | 7,154,859 | 5,928,991 | 10,765,835 | 10,276,504 |
| **Total liabilities** | | | | | | | |
| (i) Insurance contract liabilities | | | | | | | |
| At 1 January | | 293,358 | 301,835 | 4,194,315 | 3,225,656 | 10,275,779 | 9,762,993 |
| Valuation premium | | 141,261 | 136,883 | 1,384,735 | 1,352,120 | – | – |
| Liabilities released for payments on death and other terminations | | 469 | 1,899 | (120,256) | (99,711) | (69,187) | (52,546) |
| Accretion of interest | | 1,915 | 1,717 | 15,533 | 6,202 | 481,183 | 460,799 |
| Other movements | | (19,972) | (16,164) | 803,608 | 370,088 | (12,426) | (13,097) |
| Expected claims | | (116,166) | (124,072) | (1,016,807) | (941,383) | (178,355) | (153,324) |
| New business | | 19,166 | 17,228 | 3 | (4,521) | 267,930 | 270,954 |
| Change in valuation basis | | 1,196 | (1,489) | (69,019) | 285,864 | – | – |
| Impact of premium re-pricing on reserves | | 56,773 | – | – | – | – | – |
| Effect of minimum values on reserves | | (51,063) | (45,982) | – | – | – | – |
| Change in incurred but not reported claims | | 19,183 | 21,503 | – | – | – | – |
| At 31 December | | 346,120 | 293,358 | 5,192,112 | 4,194,315 | 10,764,924 | 10,275,779 |
| Current portion | | 36,232 | 4,121 | 133,187 | 106,444 | 229,889 | 210,597 |
| Non-current portion | | 309,888 | 289,237 | 5,058,925 | 4,087,871 | 10,535,035 | 10,065,182 |
| | | 346,120 | 293,358 | 5,192,112 | 4,194,315 | 10,764,924 | 10,275,779 |

| | Note | Home Protection Fund 2018 S$'000 | Home Protection Fund 2017 S$'000 | MediShield Life Fund 2018 S$'000 | MediShield Life Fund 2017 S$'000 | Lifelong Income Fund 2018 S$'000 | Lifelong Income Fund 2017 S$'000 |
|---|---|---|---|---|---|---|---|
| **Total liabilities (continued)** | | | | | | | |
| (ii) Claims intimated or admitted but not paid | | | | | | | |
| At 1 January | | 29,188 | 37,334 | 10,356 | 11,602 | – | – |
| Claims paid | | (89,170) | (90,070) | (916,003) | (836,960) | (43,786) | (41,159) |
| Claims incurred | | 89,708 | 81,924 | 921,867 | 835,714 | 43,786 | 41,159 |
| At 31 December | | 29,726 | 29,188 | 16,220 | 10,356 | – | – |
| (iii) Other payables | 20.6 | 2,004 | 458 | 51,200 | 34,611 | 911 | 725 |
| | | 377,850 | 323,004 | 5,259,532 | 4,239,282 | 10,765,835 | 10,276,504 |
| **Net assets** | | **1,149,443** | **1,190,355** | **1,895,327** | **1,689,709** | – | – |

**20.1 Statements of changes in fund balances of Insurance Funds**

| | Note | Home Protection Fund 2018 S$'000 | Home Protection Fund 2017 S$'000 | MediShield Life Fund 2018 S$'000 | MediShield Life Fund 2017 S$'000 | Lifelong Income Fund 2018 S$'000 | Lifelong Income Fund 2017 S$'000 |
|---|---|---|---|---|---|---|---|
| Fund balances as at 1 January | | 1,190,355 | 1,018,888 | 1,689,709 | 1,446,541 | – | – |
| **Add:** | | | | | | | |
| Insurance premiums | (a) | 150,846 | 159,186 | 1,914,333 | 1,881,769 | 254,862 | 269,816 |
| Net investment (loss) / gain | 20.7 | (12,674) | 123,402 | 247,979 | 200,398 | 481,183 | 460,800 |
| Interest income from bank deposits | | 1,332 | 847 | 553 | 334 | – | – |
| Other income | | – | – | 229 | – | – | – |
| | | 139,504 | 283,435 | 2,163,094 | 2,082,501 | 736,045 | 730,616 |
| **Less:** | | | | | | | |
| Claims | | 89,708 | 81,924 | 921,867 | 835,714 | 43,786 | 41,159 |
| Surrenders | | 19,257 | 19,956 | – | – | 12,334 | 10,249 |
| Payouts | | – | – | – | – | 178,355 | 153,325 |
| Professional and other charges | | 11,324 | 11,387 | 21,540 | 21,124 | 9,156 | 9,733 |
| Salaries and staff benefits | (b) | 4,971 | 4,670 | 7,642 | 6,668 | 3,229 | 3,308 |
| General and administrative expense | | 1,357 | 1,667 | 4,945 | 3,827 | 3 | 4 |
| Computer software and supplies | | 578 | 508 | 2,690 | 2,426 | 6 | 9 |
| Printing and postage | | 284 | 206 | 990 | 910 | 31 | 43 |
| Depreciation and amortisation | | 173 | 127 | 4 | 5 | – | – |
| Public utilities | | 1 | – | – | – | – | – |
| Maintenance of buildings and equipment | | – | – | 1 | – | – | – |
| Net change in insurance contract liabilities | | 52,763 | (8,477) | 997,797 | 968,659 | 489,145 | 512,786 |
| | | 180,416 | 111,968 | 1,957,476 | 1,839,333 | 736,045 | 730,616 |
| Net (decrease) / increase | | (40,912) | 171,467 | 205,618 | 243,168 | – | – |
| **Fund balances as at 31 December** | | **1,149,443** | **1,190,355** | **1,895,327** | **1,689,709** | – | – |

**(a) Insurance premiums**

Insurance premiums of MediShield Life Fund include premium subsidies and grant provided by the Government to help Singapore Citizens and Permanent Residents with their MediShield Life premiums and extend coverage to those with pre-existing conditions.

**(b) Salaries and staff benefits**

Included in salaries and staff benefits is the following:

| | Home Protection Fund 2018 S$'000 | Home Protection Fund 2017 S$'000 | MediShield Life Fund 2018 S$'000 | MediShield Life Fund 2017 S$'000 | Lifelong Income Fund 2018 S$'000 | Lifelong Income Fund 2017 S$'000 |
|---|---|---|---|---|---|---|
| Employer's CPF contributions | 685 | 648 | 1,078 | 955 | 476 | 487 |

## 20.2 Statements of cash flows of Insurance Funds

| | Note | Home Protection Fund 2018 S$'000 | Home Protection Fund 2017 S$'000 | MediShield Life Fund 2018 S$'000 | MediShield Life Fund 2017 S$'000 | Lifelong Income Fund 2018 S$'000 | Lifelong Income Fund 2017 S$'000 |
|---|---|---|---|---|---|---|---|
| **Cash flows from operating activities** | | | | | | | |
| Net (decrease) / increase in funds | | (40,912) | 171,467 | 205,618 | 243,168 | – | – |
| **Adjustments for:** | | | | | | | |
| Interest and dividend income | | (37,568) | (35,639) | (248,436) | (200,635) | (481,183) | (460,800) |
| | | **(78,480)** | **135,828** | **(42,818)** | **42,533** | **(481,183)** | **(460,800)** |
| **Changes in operating assets and liabilities:** | | | | | | | |
| Investments | | (12,210) | (148,387) | (1,170,500) | (1,284,000) | (481,080) | (504,387) |
| Premium and other receivables | | 4,802 | (1,932) | (20,882) | 33,027 | – | – |
| Insurance contract liabilities | | 52,762 | (8,477) | 997,797 | 968,659 | 489,145 | 512,786 |
| Claims intimated or admitted but not paid | | 538 | (8,146) | 5,864 | (1,246) | – | – |
| Other payables | | 1,546 | 183 | (4,498) | 2,519 | 186 | 349 |
| **Cash used in operations** | | **(31,042)** | **(30,931)** | **(235,037)** | **(238,508)** | **(472,932)** | **(452,052)** |
| Interest received | | 24,721 | 22,282 | 234,713 | 155,575 | 472,932 | 452,012 |
| Dividends received | | 13,242 | 12,308 | 3 | – | – | – |
| **Net cash from/(used in) operating activities** | | **6,921** | **3,659** | **(321)** | **(82,933)** | **–** | **(40)** |
| **Net increase/(decrease) in cash and cash equivalents** | | **6,921** | **3,659** | **(321)** | **(82,933)** | **–** | **(40)** |
| Cash and cash equivalents as at 1 January | | 180,672 | 177,013 | 23,703 | 106,636 | 10 | 50 |
| **Cash and cash equivalents as at 31 December** | 20.5 | **187,593** | **180,672** | **23,382** | **23,703** | **10** | **10** |

## 20.3 Investments

| | Home Protection Fund 2018 S$'000 | Home Protection Fund 2017 S$'000 |
|---|---|---|
| **Debt securities** | | |
| Denominated in Singapore Dollars | 394,719 | 416,527 |
| Denominated in US Dollars | 132,166 | 75,830 |
| Denominated in other currencies | 280,376 | 232,131 |
| | 807,261 | 724,488 |
| **Equity securities** | | |
| Denominated in Singapore Dollars | 1,488 | 2,592 |
| Denominated in US Dollars | 324,446 | 357,503 |
| Denominated in other currencies | 181,383 | 221,331 |
| | 507,317 | 581,426 |
| **Derivatives** | | |
| Interest-rate futures contracts purchased | | |
| - with positive fair value | – | 194 |
| - with negative fair value | – | (27) |
| Forward foreign exchange contracts | | |
| - with positive fair value | 10,241 | 5,139 |
| - with negative fair value | (5,001) | (3,612) |
| | 5,240 | 1,694 |
| | **1,319,818** | **1,307,608** |

Derivative transactions were entered with various counterparties and the funds have a legally enforceable right to set off the balances and have the intention to realise the derivative assets and settle the derivative liabilities simultaneously when needed. The gross amounts of the derivative assets and liabilities are presented in the above table.



Investments included debt securities issued by the Singapore Government and statutory boards of S$394,719,000 (2017: S$416,527,000) for Home Protection Fund.

In 2017, investment securities in Home Protection Fund were designated as financial assets at FVTPL. In 2018, debt securities in Home Protection Fund continue to be designated as financial assets at FVTPL because this designation eliminates or significantly reduces the accounting mismatch that would otherwise arise from measuring assets and liabilities or recognising the gains and losses on them on different bases. Equity securities that Home Protection Fund also invests in are measured at FVTPL in 2018.

| | MediShield Life Fund 2018 S$'000 | MediShield Life Fund 2017 S$'000 | Lifelong Income Fund 2018 S$'000 | Lifelong Income Fund 2017 S$'000 |
|---|---|---|---|---|
| Special issues of Singapore Government securities | 6,886,500 | 5,716,000 | 10,606,428 | 10,125,543 |
| Advance deposits | – | – | 447 | 252 |
| | **6,886,500** | **5,716,000** | **10,606,875** | **10,125,795** |

The Lifelong Income Fund invests jointly with the Central Provident Fund in special issues of Singapore Government securities. The effective interest rate on special issues of Singapore Government securities paying LIFE and Retirement Account rate is within the range of 4.00% to 6.00% (2017: 4.00% to 6.00%) per annum.

MediShield Life Fund is invested in cash and cash equivelents, and special issues of Singapore Government securities that pay interest rate of 4.00% per annum.

The special issues of Singapore Government securities are issued specifically to the Board to meet interest and other obligations of the respective funds. They do not have quoted market values and cannot be traded in open market.

The advance deposits are deposits placed with the Accountant-General through the Monetary Authority of Singapore to purchase special issues of Singapore Government securities. The effective interest rate on advance deposits is 2.50% (2017: 2.50%) per annum.

The investment in special issues of Singapore Government securities and advance deposits are accounted for as held-to-maturity financial asset and financial assets at amortised cost in 2017 and 2018 respectively.

### 20.4 Premium and other receivables

| | Home Protection Fund 2018 S$'000 | Home Protection Fund 2017 S$'000 | MediShield Life Fund 2018 S$'000 | MediShield Life Fund 2017 S$'000 |
|---|---|---|---|---|
| Premium receivables | – | – | 66,087 | 51,968 |
| Allowance for impairment loss | – | – | (8,510) | (3,698) |
| | **–** | **–** | **57,577** | **48,270** |
| Other receivables | 13,313 | 18,124 | 76,455 | 64,880 |
| | **13,313** | **18,124** | **134,032** | **113,150** |

The ageing of premium receivables at the reporting date was:

| | 2018 Gross S$'000 | 2018 Impairment S$'000 | 2017 Gross S$'000 | 2017 Impairment S$'000 |
|---|---|---|---|---|
| **MediShield Life Fund** | | | | |
| Past due 1 year or less | 35,808 | 2,592 | 31,118 | 1,026 |
| Past due more than 1 year | 30,279 | 5,918 | 20,850 | 2,672 |
| | **66,087** | **8,510** | **51,968** | **3,698** |

The movement in the allowance for impairment in respect of premium receivables during the year was as follow:

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| **MediShield Life Fund** | | |
| At 1 January | 3,698 | – |
| Allowance for the year | 4,812 | 3,698 |
| **At 31 December** | **8,510** | **3,698** |

The Board evaluates whether there is any objective evidence that premium receivables are impaired and determines the amount of impairment loss based on ability of recovering premiums from members. The Board makes the assessment by evaluating the ageing of the premium receivables and the demographics of the members. Estimates are made based on ability to recover from certain groups of members. This includes overseas Singapore citizens who reside permanently outside Singapore and have been approved for suspension of MediShield Life premium collection, with premium amount totalling S$4,199,000 (2017: S$2,621,000) as at reporting date. Other groups being considered include deceased, renounced members and very elderly members with outstanding premiums.

The Board assessed that no impairment allowance is necessary for other receivables as these balances are not past due.



### 20.5 Cash and cash equivalents

| | Note | Home Protection Fund 2018 S$'000 | Home Protection Fund 2017 S$'000 | MediShield Life Fund 2018 S$'000 | MediShield Life Fund 2017 S$'000 | Lifelong Income Fund 2018 S$'000 | Lifelong Income Fund 2017 S$'000 |
|---|---|---|---|---|---|---|---|
| Cash at banks | | 53,166 | 34,907 | 53,936 | 33,170 | 10 | 10 |
| Bank deposits | | 134,427 | 145,765 | – | – | – | – |
| **Cash and cash equivalents** | | **187,593** | **180,672** | **53,936** | **33,170** | **10** | **10** |
| Less: Cash at banks managed by the Board on behalf of Government ministries | (a) | – | – | (30,554) | (9,467) | – | – |
| **Cash and cash equivalents in the statement of cash flows** | | **187,593** | **180,672** | **23,382** | **23,703** | **10** | **10** |

(a) This refers to other funds held by MediShield Life Fund received from the Government ministries for payment of premiums and subsidies.

### 20.6 Other payables

| | Note | Home Protection Fund 2018 S$'000 | Home Protection Fund 2017 S$'000 | MediShield Life Fund 2018 S$'000 | MediShield Life Fund 2017 S$'000 | Lifelong Income Fund 2018 S$'000 | Lifelong Income Fund 2017 S$'000 |
|---|---|---|---|---|---|---|---|
| Amount due to Government ministries for cash at banks managed on behalf by the Board | 20.5 | – | – | 30,554 | 9,467 | – | – |
| Other payables | | 2,004 | 458 | 20,646 | 25,144 | 911 | 725 |
| | | **2,004** | **458** | **51,200** | **34,611** | **911** | **725** |

### 20.7 Net investment (loss) / gain

| | Home Protection Fund 2017 S$'000 | MediShield Life Fund 2017 S$'000 | Lifelong Income Fund 2017 S$'000 |
|---|---|---|---|
| Interest income | 22,477 | 200,301 | 460,800 |
| Dividend income | 12,315 | – | – |
| Net fair value gain | 92,113 | – | – |
| Net foreign currency exchange (loss) / gain | (2,407) | 12 | – |
| Miscellaneous revenue | 18 | 85 | – |
| Fund management fees | (1,114) | – | – |
| | **123,402** | **200,398** | **460,800** |

| | Home Protection Fund 2018 S$'000 | MediShield Life Fund 2018 S$'000 | Lifelong Income Fund 2018 S$'000 |
|---|---|---|---|
| Interest income | 23,003 | 247,879 | 481,183 |
| Dividend income | 13,233 | 3 | – |
| Net fair value loss on: | | | |
| - financial asset designated as FVTPL | (8,282) | – | – |
| - financial asset at FVTPL | (35,958) | – | – |
| Net foreign currency exchange loss | (3,203) | (21) | – |
| Miscellaneous revenue | 99 | 118 | – |
| Fund management fees | (1,566) | – | – |
| | **(12,674)** | **247,979** | **481,183** |

The net fair value gain or loss includes both the realised and unrealised fair value gain or loss and foreign currency exchange gain or loss for investments classified at FVTPL. Net foreign currency exchange gain or loss for investments that are not classified as FVTPL is separately disclosed under "Net foreign currency exchange gain/(loss)".



### 20.8 Financial derivatives

Notional principal of the financial derivatives are as follows:

| | Home Protection Fund 2018 S$'000 | Home Protection Fund 2017 S$'000 |
|---|---|---|
| Interest-rate futures contracts: | | |
| - future contracts purchased | – | 18,728 |
| Forward foreign exchange contracts | 1,922,906 | 1,904,032 |

### 20.9 Risk management of insurance contracts

**Home Protection Fund**

(i) The risks arising from insurance policies issued under the Home Protection Insurance Scheme are death, terminal illness and total permanent disability risks of a relatively homogeneous portfolio of mortgage reducing term insurance policies. These risks do not vary significantly in relation to the location of the risk insured by the Home Protection Fund.

The objectives in managing these risks are to ensure that:

(a) all legitimate claims of insured members are met;
(b) the Home Protection Fund is financially solvent at all times; and
(c) the Home Protection Fund is operated in accordance with the Act, the Home Protection Insurance Scheme regulations and the operating policies of the Home Protection Insurance Scheme.

(ii) The policies, processes and methods for managing insurance risks are to:

(a) maintain a relatively large portfolio. Experience shows that the larger the portfolio of similar insurance policies, the smaller the relative variability in the expected outcome;
(b) manage the Home Protection Fund and insurance contract portfolio in accordance with sound actuarial, financial and accounting principles;
(c) adopt an underwriting strategy to recognise and select the insurance risks accepted so that the claim experience is unlikely to deteriorate;
(d) review regularly its experience, adequacy of premiums and reserves by the independent actuarial adviser of the Home Protection Fund;
(e) retain sufficient surplus to allow for volatility of results; and
(f) exclude claims arising from war or any warlike operations or participation in any riot.

The insurance contract portfolio's experience, fund solvency and premium adequacy are reviewed by the independent actuarial adviser of the Home Protection Fund annually using the Risk Based Capital framework issued by the Monetary Authority of Singapore for the valuation of liabilities and establishment of capital requirement rules for insurers. The independent actuarial adviser also projects the solvency position of the Home Protection Fund to ascertain the Fund's sustainability.

(iii) The terms and conditions of insurance contracts that have a material effect on the amount, timing and uncertainty of future cash flows of the Home Protection Fund are:

(a) mortality, terminal illness and total permanent disability risks. The Home Protection Fund is exposed to the risk of the experience being worse than what was assumed; and

(b) epidemics such as Acquired Immune Deficiency Syndrome ("AIDS") and Severe Acute Respiratory Syndrome ("SARS") or widespread changes in lifestyle that could result in earlier and/or more claims than expected.

(iv) The Home Protection Fund has no major exposure to concentration of risks, other than that the insured members are residing in Singapore.

**MediShield Life Fund**

(i) The risks arising from insurance policies issued under the MediShield Life Scheme are those of a relatively homogeneous portfolio of health insurance policies.

The objectives in managing these risks are to ensure that:

(a) all legitimate claims of insured members are met;
(b) the MediShield Life Fund is solvent at all times; and
(c) the MediShield Life Fund is operated in accordance with the MediShield Life Scheme Act 2015, regulations and the operating policies of the MediShield Life Scheme.

(ii) The policies, processes and methods for managing insurance risks are to:

(a) manage the MediShield Life Fund and insurance contract portfolio in accordance with sound actuarial, financial and accounting principles;
(b) adopt an underwriting strategy to recognise Additional Premiums required to mitigate the insurance risks of new members with serious pre-existing medical conditions in accordance with guidelines for risk loading;
(c) review regularly its experience, adequacy of premiums and reserves by the independent actuarial adviser of the MediShield Life Fund; and
(d) retain sufficient surplus to allow for volatility of results.

The insurance contract portfolio's experience, fund solvency and premium adequacy are reviewed by the independent actuarial adviser of the MediShield Life Fund annually using the Risk Based Capital framework issued by the Monetary Authority of Singapore for the valuation of liabilities and establishment of capital requirement rules for insurers.

(iii) The terms and conditions of insurance contracts that have a material effect on the amount, timing and uncertainty of future cash flows of the MediShield Life Fund are:

(a) the policies provide indemnity benefits covering specified medical and hospitalisation conditions. The amount payable depends on the cost incurred by the insured member in respect of any particular event or treatment and the specified upper limits;
(b) the renewal of each insurance policy is guaranteed until the insured member dies, unless the insured member's cover is discontinued by the Board in circumstances specified in the legislation or by the Minister charged with the responsibility of the MediShield Life Scheme; and
(c) premium rebate which are offered to insured members, as provided for in the MediShield Life Scheme Regulations 2015.

(iv) Insurance risks are concentrated on specified individual health risks applicable to residents of Singapore. This concentration is a direct result of the MediShield Life Scheme consisting of a single medical insurance product. The shared characteristics of the risks insured by the MediShield Life Fund include:

(a) hospitalisation as the prime insured event;
(b) all insured events occurring within Singapore; and
(c) benefit payments being made in Singapore Dollars.

(v) With the exception of continuing outpatient treatments, the amounts of almost all claims are known within one year of the event occurring. For continuing outpatient treatments, each individual claim amount is known within a year, but liabilities to pay for the further treatments may continue for several years.

**Lifelong Income Fund**

(i) The risks arising from insurance policies issued under the Lifelong Income Scheme are mortality and interest rate risks of a relatively homogeneous portfolio of annuities. These risks do not vary significantly in relation to the location of the risk insured by the Lifelong Income Fund.

The objectives in managing these risks are to ensure that:

(a) all legitimate payments of insured members are met;
(b) the Lifelong Income Fund is financially solvent at all times; and
(c) the Lifelong Income Fund is operated in accordance with the Act, Lifelong Income Scheme regulations and the operating policies of the Lifelong Income Scheme.

(ii) The policies, processes and methods for managing insurance risks are to:

(a) adjust payouts to insured members as appropriate so that the pool of policies bears all mortality risk and interest rate risk;
(b) invest in special issues of Singapore Government securities that earn an appropriate interest rate to cover expenditure and interest credits for insured members;
(c) review regularly its experience in relation to the existing pricing assumptions; and
(d) retain sufficient cash float to allow for volatility in death claims.

The Lifelong Income Scheme enables payouts to be adjusted over time to take account of variation in the experience for mortality and net interest credited, thus removing that risk from the Fund as a whole. The insurance contract portfolio's experience and fund solvency are reviewed by the independent actuarial adviser of the Lifelong Income Fund annually using the Risk Based Capital framework issued by the Monetary Authority of Singapore for the valuation of liabilities.

(iii) The terms and conditions of insurance contracts that have a material effect on the amount, timing, and uncertainty of future cash flows of the Lifelong Income Fund are:

(a) the provision that monthly payouts to a member be made while members are alive after the member's payout age, and cease when the member dies;
(b) the provision for net investment returns from the assets of the scheme to be allocated among members; and
(c) the provision under some contracts for a benefit to be paid to the member's beneficiaries on death.

(iv) The Lifelong Income Fund has no major exposure to concentration risk other than that the vast majority of insured members are residing in Singapore.

**20.10 Insurance contract liabilities**

The insurance contract liabilities of the Home Protection Fund, MediShield Life Fund and Lifelong Income Fund are determined by the Board based on the advice of the independent actuarial advisers of the Board. The insurance contract liabilities are valued using the methodology prescribed for insurers in Singapore as stated in the Insurance (Valuation and Capital) Regulations 2004 issued by the Monetary Authority of Singapore.

In respect of insurance contracts under the Home Protection Fund and MediShield Life Fund, the Board values the liabilities using realistic assumptions and discounting future cash flows at the appropriate rate. The method of valuation is a gross premium valuation method. The cash flows are projected in accordance with best estimate assumptions. Additional provision is required in the valuation assumptions to allow for any adverse deviation from the best estimate experience. The level of additional provision is reviewed periodically by the independent actuarial advisers to assess its appropriateness and sufficiency.

The Lifelong Income Scheme is designed to distribute 100% of its net assets to the insured members via monthly payouts starting from the annuity payout start age of each individual insured member for as long as the member lives. All risks are shared by the insured members. Therefore, for the insurance contracts issued under the Lifelong Income Fund, the insurance contract liabilities are valued as the total net assets held in the Lifelong Income Fund for the benefit of insured members. Valuation assumptions about future experience are not required as the liability value in aggregate is not affected by future interest rates, expenditure, withdrawals or mortality rates.

The assumptions used for the valuation of the Home Protection Fund and MediShield Life Fund are based on those prescribed in the valuation regulations issued by the Monetary Authority of Singapore that apply to insurers in Singapore. Valuation assumptions not prescribed by the Monetary Authority of Singapore are set according to experience studies or common market practice.

**Home Protection Fund**

The key assumptions used are:

(a) Mortality, terminal illness and total permanent disability rates

Mortality, terminal illness and total permanent disability rates are set based on experience studies carried out on the Home Protection Fund.

(b) Expense loadings

Expense assumptions are set based on an analysis of expense experience of the Home Protection Fund. Such a study is conducted on an annual basis. Consideration is also given to the expense budget that is approved for the following year.

(c) Lapse rates

Lapse rates are set based on experience studies carried out on the Home Protection Fund. Such a study is conducted on an annual basis.

(d) Valuation discount rate

The valuation discount rates are prescribed by the Monetary Authority of Singapore as matching to the Singapore Government bond yields for cash flows prior to 15 years, a Long Term Risk Free Discount Rate ("LTRFDR") for cash flows after 20 years, and an interpolation of the 15 year Singapore Government bond yield and the LTRFDR for cash flows between 15 to 20 years. The Singapore Government bond prices and yields are published on the Singapore Government securities website.

(e) The following table presents the sensitivity of the value of the insurance contract liabilities to movements in the assumptions used:

| | 2018 | | 2017 | |
|---|---|---|---|---|
| | **Change in variable %** | **Increase in liability S$'000** | **Change in variable %** | **Increase in liability S$'000** |
| **Home Protection Fund** | | | | |
| Worsening of claim rates | +10 | 62,074 | +10 | 38,558 |
| Shift in risk-free yield curve | -0.5 | 9,743 | -0.5 | 5,668 |
| Worsening of base expense level | +10 | 11,472 | +10 | 6,949 |
| Change in lapse rates | -10 | 13,560 | -10 | 6,729 |

**MediShield Life Fund**

The variability of insurance results will affect the value of insurance liabilities from year to year. Such variations, from the valuation assumptions, are normal and are to be expected in an insurance portfolio. The material variables are:

(a) mortality and lapse rates;
(b) claim frequency per person covered;
(c) average claim amount per claim;
(d) impact of inflation of healthcare costs on claim amounts;
(e) cessation rates for patients with outpatient claims in payments;
(f) changes in scheme and impact;
(g) the premium rates; and
(h) the discount rate used for calculating the value of liabilities, which is based on the risk free yield curve.

Data used to determine assumptions regarding claim amount, claim frequency, cessation of outpatient treatment, lapse and mortality are sourced from annual reviews of the experience of the MediShield Life Fund, augmented by periodic reviews of Singapore hospitalisation data carried out in conjunction with premium and benefit reviews. Data used to support assumptions regarding claim inflation is sourced from general economic published material, augmented by the experience of the MediShield Life Fund. Data to determine the discount rate assumed is widely published.

(a) Mortality and lapse rates

The mortality assumptions are based on applying the experience of the MediShield Life Fund to the published Singapore mortality table "Complete Life Tables 2013-2014 for Singapore Resident Population" with some allowance for reductions to the mortality rate in line with expected future trends. Lapse and mortality assumptions are reviewed each year to reflect the scheme rules, underlying trends as well as the latest available and relevant experience.

(b) and (c) Claim frequency and average claim size

Claims assumptions are generally based on past hospitalisation experience data, modified for expected future inflation of these costs and by the claim benefits under the MediShield Life Scheme.

(d) Claim inflation

Future trends in healthcare inflation and healthcare utilisation growth are combined into an assumption of claim inflation. The judgment of this assumption is based on published Singapore economic information, similar experience information from other countries, analysis of past experience, and identification of the forces that may operate in the future to affect this outcome.

(e) Cessation rates for outpatient treatment

The cessation rates are based on an analysis of the experience of the Singapore population and of the MediShield Life Scheme over the past five years. The cessation rates vary by the duration that the claimant has been receiving outpatient treatment.

(f) Premium rates

Premiums are assumed not to increase until experience requires it. The MediShield Life Fund has no shareholders, and all assets of the MediShield Life Fund are for the purpose of providing benefits to MediShield Life members in accordance with the MediShield Life Scheme. All benefits and premiums for MediShield Life Scheme are set out from time to time in relevant laws and regulations, and can be changed by those laws and regulations.

(g) Valuation discount rate

The valuation discount rate is prescribed by the Monetary Authority of Singapore and effectively assumes the Singapore Government bond yields for cash flows prior to 15 years, a Long Term Risk Free Discount Rate ("LTRFDR") for cash flows after 20 years, and an interpolation of the 15 year Singapore Government bond yields. The Singapore Government bond prices and yields are published on the Singapore Government securities website.



The following table presents the sensitivity of the value of the insurance contract liabilities to movements in the assumptions used:

| | 2018 | | 2017 | |
|---|---|---|---|---|
| | Change in variable % | Increase in liability S$'000 | Change in variable % | Increase in liability S$'000 |
| **MediShield Life Fund** | | | | |
| Increase in average new claim size | +10 | 375,003 | +10 | 390,592 |
| Increase in new claim frequency | +10 | 375,003 | +10 | 390,592 |
| Increase in inflation of claim costs | +1 p.a. | 178,884 | +1 p.a. | 181,817 |
| Reduction in cessation rates of outpatient claims | -10 | 217,383 | -10 | 213,876 |
| Shift in risk-free yield curve | -0.5 p.a. | 54,785 | -0.5 p.a. | 52,747 |
| Change in lapse rates | -50 | 1,386 | -50 | 740 |

### 20.11 Financial risk management of Insurance Funds

**Market risk**

Market risk, such as interest rate risk, foreign currency risk and equity price risk, arises from the investments in global and local debt securities, equities and derivatives when the market values of assets and liabilities do not move consistently to changes in the financial markets. Given the duration of policy liabilities and uncertainty of cash flows of the Home Protection Fund and the MediShield Life Fund, it is not possible to hold assets that will perfectly match the policy liabilities.

Given the nature of the Lifelong Income Scheme where there is no minimum payout guarantees and payouts are adjusted in response to changes in interest rates, all market risk is borne by the insured members. Accordingly, there is no exposure to market risk for the Lifelong Income Fund.

Asset-liability decisions are considered by the Board with an objective of limiting the extent to which solvency can be affected by adverse market and interest rate movements. Market risk is actively managed through the setting of investment policy and asset allocation within the approved risk tolerance limits. The investment policy includes certain restrictions on currency, credit, concentration, borrowing and counterparty risks. Market risk is diversified by investing the assets of the Home Protection Fund in different asset classes and various markets. The MediShield Life Fund is invested in special issues of Singapore Government securities, and Singapore Dollar cash and cash equivalents, except for a small residual amount of receivables, cash and cash equivalents in foreign currencies. The Lifelong Income Fund is invested in special issues of Singapore Government securities, advance deposits, cash and cash equivalents. The Board regularly monitors the exposure of the Home Protection Fund to different asset classes to ensure that these exposures are within the approved ranges.

Derivatives are financial contracts whose values are derived from the value of underlying assets. They are used for hedging purposes to manage portfolio risk and for efficient portfolio management to improve risk-adjusted performance. The major classes of derivatives are as follows:

- Futures / forwards contracts to buy or sell an asset on or before a future date at a price specified at the time of entry;
- Options contracts that give the owner the right to buy or sell an asset at the strike price, specified at the time of entry and lapsing on the maturity date; and
- Swaps contracts to exchange cash on or before a specified future date based on the underlying value of interest rates or other assets.

Approved guidelines detail the permissible derivative instruments and their risk limits. Ongoing monitoring and reporting are undertaken at various levels to ensure that investment activities are in accordance with the investment guidelines.

**Interest rate risk**

The Home Protection Fund is exposed to both fair value and cash flow interest rate risks as a result of investments in fixed and variable rate debt securities. The MediShield Life Fund is exposed to cash flow interest rate risk due to cash deposits at banks. The interest rates on these investments are determined based on prevailing market rates. The fair value interest rate risk is the risk that the value of a financial instrument will fluctuate due to changes in market interest rates. The cash flow interest rate risk is the risk that future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Exposure of the Lifelong Income Fund to interest rate risk is entirely borne by the insured members.

The investments in debt securities are as follows:

| | Carrying amount (at fair value) 2018 S$'000 | 2017 S$'000 | Percentage of total investment of the Insurance Funds 2018 % | 2017 % |
|---|---|---|---|---|
| Home Protection Fund | 807,261 | 724,488 | 61.2 | 55.4 |

The interest rates, carrying amounts and maturities of debts securities are shown in the following table:

| | Interest rate (per annum) 2018 % | 2017 % | Years to maturity: Not later than one year 2018 S$'000 | 2017 S$'000 | Later than one year and not later than five years 2018 S$'000 | 2017 S$'000 | Later than five years 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|---|---|---|---|---|
| **At fair value** | | | | | | | | |
| **Denominated in SGD** | | | | | | | | |
| Home Protection Fund | 1.63 – 3.50 | 0.50 – 4.00 | 3,134 | 19,113 | 61,090 | 112,100 | 330,495 | 285,314 |
| **Denominated in USD** | | | | | | | | |
| Home Protection Fund | 0.13 – 5.50 | 0.13 – 8.13 | 14,955 | 2,811 | 59,562 | 39,660 | 57,649 | 33,359 |
| **Denominated in other currencies** | | | | | | | | |
| Home Protection Fund | 0.00 – 10.00 | 0.10 – 10.00 | 2,169 | 4,361 | 86,217 | 36,279 | 191,990 | 191,491 |

The interest rates, carrying amounts and maturities of cash and cash equivalents are shown in the following table:

| | Interest rate (per annum) | | Years to maturity less than 1 year | |
|---|---|---|---|---|
| | 2018 | 2017 | 2018 | 2017 |
| | % | % | S$'000 | S$'000 |
| **Denominated in SGD** | | | | |
| Home Protection Fund | 0.00 – 2.25 | 0.00 – 1.39 | 104,391 | 95,808 |
| MediShield Life Fund | 0.00 – 1.56 | 0.00 – 0.87 | 53,936 | 33,170 |
| **Denominated in USD** | | | | |
| Home Protection Fund | 0.00 – 2.80 | 0.00 – 1.60 | 43,672 | 30,737 |
| **Denominated in other currencies** | | | | |
| Home Protection Fund | 0.00 – 0.00 | 0.00 – 1.88 | 39,530 | 54,127 |

**Foreign currency risk**

The Home Protection Fund is exposed to foreign exchange risk as a result of global investments. Hedging policies are put in place to mitigate these risks, where necessary. The sensitivity analysis for possible movements in key currencies with all other variables held constant is detailed in the sensitivity analysis below. The Lifelong Income Fund is not exposed to any foreign exchange risk. The MediShield Life Fund is also not exposed to any foreign exchange risk except for a small residual amount of receivables, cash and cash equivalents in foreign currencies.

The following table presents gross major currency exposures of the Home Protection Fund (excluding the effect of derivatives used for hedging) as of the date of the financial statements, expressed in Singapore Dollars equivalent.

| | Home Protection Fund | |
|---|---|---|
| | 2018 | 2017 |
| | S$'000 | S$'000 |
| US Dollar | 500,284 | 468,882 |
| Euro Dollar | 156,211 | 134,627 |
| Japanese Yen | 83,562 | 58,279 |
| Mexican Peso | 33,794 | 28,216 |
| Sterling Pound | 29,866 | 66,988 |
| Canadian Dollar | 24,052 | 26,634 |

**Equity price risk**

The Home Protection Fund is exposed to equity price risk arising from its investment in equity securities which are classified as financial assets at FVTPL. The market values of these investments are affected by, amongst others, changes in market prices as a result of changes in the global economic conditions, macro and micro economic factors affecting the country where the investments are quoted, and factors specific to the investee corporations.

The fluctuations in market prices due to the above factors are unforeseen. To manage the price risk arising from investments in equity, the Home Protection Fund diversifies its portfolio across different markets and industries whenever it is appropriate.

The Lifelong Income Fund and MediShield Life Fund are not exposed to equity price risk as the funds only invest in cash and cash equivalents with banks, and special issues of Singapore Government securities with the Monetary Authority of Singapore.

Sensitivity analysis

The analysis below is presented for reasonably possible movements in key variables with all other variables remaining constant.

| | Home Protection Fund | |
|---|---|---|
| | 2018 | 2017 |
| | S$'000 | S$'000 |
| **Change in variables:** | | |
| **Equity prices** | | |
| +10% | 50,732 | 58,143 |
| -10% | (50,732) | (58,143) |
| **Foreign currency** | | |
| +5% | | |
| US Dollar | 25,014 | 23,444 |
| Euro Dollar | 7,811 | 6,731 |
| Japanese Yen | 4,178 | 2,914 |
| Mexican Peso | 1,690 | 1,411 |
| Sterling Pound | 1,493 | 3,349 |
| Canadian Dollar | 1,203 | 1,332 |
| -5% | | |
| US Dollar | (25,014) | (23,444) |
| Euro Dollar | (7,811) | (6,731) |
| Japanese Yen | (4,178) | (2,914) |
| Mexican Peso | (1,690) | (1,411) |
| Sterling Pound | (1,493) | (3,349) |
| Canadian Dollar | (1,203) | (1,332) |
| **Interest rate** | | |
| +50 bps | (33,401) | (28,151) |
| -50 bps | 33,401 | 28,151 |

**Concentration risk**

Concentration of the investments of Home Protection Fund are analysed as follows:

| | 2018 S$'000 | 2017 S$'000 | Percentage of investments 2018 % | 2017 % |
|---|---|---|---|---|
| **Home Protection Fund** | | | | |
| **Debt securities** | | | | |
| Singapore | 394,720 | 416,527 | 30 | 32 |
| United States | 131,633 | 58,485 | 10 | 4 |
| Japan | 51,962 | 8,623 | 4 | 1 |
| Mexico | 31,814 | 28,394 | 2 | 2 |
| Italy | 22,221 | 18,219 | 2 | 1 |
| Malaysia | 18,648 | 4,349 | 1 | 1 |
| Poland | 16,626 | 34,536 | 1 | 3 |
| Indonesia | 15,809 | 12,421 | 1 | 1 |
| France | 14,077 | 16,244 | 1 | 1 |
| Others | 109,751 | 126,691 | 9 | 10 |
| **Equity securities** | | | | |
| United States | 308,959 | 339,701 | 24 | 26 |
| Japan | 31,090 | 49,443 | 2 | 4 |
| United Kingdom | 20,477 | 35,380 | 2 | 3 |
| Canada | 16,338 | 20,039 | 1 | 1 |
| Switzerland | 14,562 | 18,368 | 1 | 1 |
| Others | 115,891 | 118,494 | 9 | 9 |
| **Derivatives** | | | | |
| United States | – | 109 | – | – |
| United Kingdom | – | 45 | – | – |
| Japan | – | 36 | – | – |
| Others | 5,240 | 1,504 | – | – |

The investments of the Lifelong Income Fund and MediShield Life Fund are concentrated in special issues of Singapore Government securities, advance deposits or cash and cash equivalents held with a number of financial institutions.

**Credit risk**

The maximum credit risk exposure at the end of the year, in relation to each class of financial assets, is the carrying amount of those assets at the end of the year.

The Home Protection Fund is exposed to credit risk through (i) investments in cash (including fixed deposits) placed with financial institutions, and debt securities and (ii) exposure to counterparty's credit in derivative transactions. For the two types of exposures, financial loss may materialise as a result of credit default by the debt issuer or bank counterparty. For investments in debt securities, financial loss may also materialise as a result of the widening of credit spread or a downgrade of credit rating. The Lifelong Income Fund and MediShield Life Fund are exposed to minimal credit risk in respect of investments in cash, special issues of Singapore Government securities and/or advance deposits with the Monetary Authority of Singapore.

Swaps, interest rate options, foreign exchange, currency options, over the counter options and other derivative positions are covered by International Swaps and Derivative Association master agreements. Derivative positions are marked to market daily, and the market value is considered to be the amount in the money. Collaterals may be provided or requested to or from counterparties dependent upon whether the derivative positions are out or in the money.

The Board manages credit risk actively through the setting of minimum credit rating requirements and investment limits for issuers and counterparties within the approved investment guidelines. These limits are reviewed as and when necessary. Ongoing monitoring and reporting are undertaken at various levels to ensure that all investment activities are in accordance with the investment guidelines.

Exposure of the Home Protection Fund to credit risk relating to its debts securities and financial derivatives are presented below (in millions of Singapore Dollars):

| | AAA* S$'m | AA* S$'m | A* S$'m | BBB* S$'m | BB* S$'m | Not rated ** S$'m | Total S$'m |
|---|---|---|---|---|---|---|---|
| **Home Protection Fund** | | | | | | | |
| **2018** | | | | | | | |
| Singapore Government securities | 394.7 | – | – | – | – | – | 394.7 |
| Other Government bonds | 164.1 | 44.9 | 121.3 | 69.5 | – | 12.3 | 412.1 |
| Corporate bonds | – | – | – | 0.5 | – | – | 0.5 |
| Financial derivatives (counterparty) | – | – | 5.2 | – | – | – | 5.2 |
| | **558.8** | **44.9** | **126.5** | **70.0** | **–** | **12.3** | **812.5** |
| **2017** | | | | | | | |
| Singapore Government securities | 416.5 | – | – | – | – | – | 416.5 |
| Other Government bonds | 61.1 | 54.5 | 68.4 | 60.7 | 25.4 | 0.4 | 270.5 |
| Corporate bonds | 2.5 | 2.1 | 24.6 | 8.3 | – | – | 37.5 |
| Financial derivatives (counterparty) | – | – | 1.7 | – | – | – | 1.7 |
| | **480.1** | **56.6** | **94.7** | **69.0** | **25.4** | **0.4** | **726.2** |

* Based on public credit ratings assigned by external credit rating agencies Standard & Poor's, Moody's and Fitch.

** Based on internal credit ratings, and holdings are rated equivalent to Standard & Poor's credit ratings of "AAA to A".

**Financial assets that are neither past due nor impaired**

For the Home Protection Fund, the cash is placed as short term deposits with financial institutions which have good credit ratings. The debt securities and approved counterparties of Home Protection Fund must meet stringent credit rating criteria. None of the financial assets are past due nor impaired.

**Liquidity risk**

In the management of liquidity risk of the Insurance Funds, the Board seeks to ensure that even under adverse conditions, the Insurance Funds have access to the funds necessary to cover for claims and surrenders. Management monitors and maintains adequate cash and bank balances to finance the operations of the Insurance Funds and mitigate the effects of fluctuations in cash flows. In addition, the financial assets of the Insurance Funds can be readily sold or redeemed when the need arises.

The following tables show undiscounted financial liabilities with the remaining contractual maturity periods of the Insurance Fund. For liabilities arising from insurance contracts, the disclosure is the estimated timing of net cash outflows resulting from recognised insurance liabilities i.e. on a discounted basis.

| | Not later than one year S$'000 | Later than one year and not later than five years S$'000 | Later than five years S$'000 | Total S$'000 |
|---|---|---|---|---|
| **Home Protection Fund** | | | | |
| **2018** | | | | |
| Insurance contract liabilities | 36,232 | 64,347 | 245,541 | 346,120 |
| Claims intimated or admitted but not paid | 29,726 | – | – | 29,726 |
| Other payables | 2,004 | – | – | 2,004 |
| | **67,962** | **64,347** | **245,541** | **377,850** |
| **2017** | | | | |
| Insurance contract liabilities | 4,121 | 7,569 | 281,668 | 293,358 |
| Claims intimated or admitted but not paid | 29,188 | – | – | 29,188 |
| Other payables | 458 | – | – | 458 |
| | **33,767** | **7,569** | **281,668** | **323,004** |
| **MediShield Life Fund** | | | | |
| **2018** | | | | |
| Insurance contract liabilities | 133,187 | 1,498,340 | 3,560,585 | 5,192,112 |
| Claims intimated or admitted but not paid | 16,220 | – | – | 16,220 |
| Other payables | 51,200 | – | – | 51,200 |
| | **200,607** | **1,498,340** | **3,560,585** | **5,259,532** |
| **2017** | | | | |
| Insurance contract liabilities | 106,444 | 1,253,470 | 2,834,401 | 4,194,315 |
| Claims intimated or admitted but not paid | 10,356 | – | – | 10,356 |
| Other payables | 34,611 | – | – | 34,611 |
| | **151,411** | **1,253,470** | **2,834,401** | **4,239,282** |

| | Not later than one year S$'000 | Later than one year and not later than five years S$'000 | Later than five years S$'000 | Total S$'000 |
|---|---|---|---|---|
| **Lifelong Income Fund** | | | | |
| **2018** | | | | |
| Insurance contract liabilities | 229,889 | 1,257,365 | 9,277,670 | 10,764,924 |
| Other payables | 911 | – | – | 911 |
| | **230,800** | **1,257,365** | **9,277,670** | **10,765,835** |
| **2017** | | | | |
| Insurance contract liabilities | 210,597 | 1,064,905 | 9,000,277 | 10,275,779 |
| Other payables | 725 | – | – | 725 |
| | **211,322** | **1,064,905** | **9,000,277** | **10,276,504** |

**20.12 Fair value of assets and liabilities**

The carrying amount of financial assets and liabilities with a maturity of less than a year including cash and cash equivalents, other receivables, and other payables are estimated to approximate their fair values due to the short period to maturity.

| | Designated as FVTPL S$'000 | FVTPL S$'000 | Amortised cost S$'000 | Other financial liabilities S$'000 | Total carrying amount S$'000 | Fair value S$'000 |
|---|---|---|---|---|---|---|
| **Home Protection Fund** | | | | | | |
| **31 December 2018** | | | | | | |
| Investments | | | | | | |
| - debt securities | 807,261 | – | – | – | 807,261 | 807,261 |
| - equity securities | – | 507,317 | – | – | 507,317 | 507,317 |
| - derivatives | – | 5,240 | – | – | 5,240 | 5,240 |
| Other receivables | – | – | 13,313 | – | 13,313 | 13,313 |
| Interest receivables | – | – | 6,569 | – | 6,569 | 6,569 |
| Cash and cash equivalents | – | – | 187,593 | – | 187,593 | 187,593 |
| | **807,261** | **512,557** | **207,475** | **–** | **1,527,293** | **1,527,293** |
| Other payables | **–** | **–** | **–** | **(2,004)** | **(2,004)** | **(2,004)** |

| | Fair value through profit or loss S$'000 | Loans and receivables S$'000 | Other financial liabilities S$'000 | Total carrying amount S$'000 | Fair value S$'000 |
|---|---|---|---|---|---|
| **Home Protection Fund** | | | | | |
| **31 December 2017** | | | | | |
| Investments | | | | | |
| - debt securities | 724,488 | – | – | 724,488 | 724,488 |
| - equity securities | 581,426 | – | – | 581,426 | 581,426 |
| - derivatives | 1,694 | – | – | 1,694 | 1,694 |
| Other receivables | – | 18,124 | – | 18,124 | 18,124 |
| Interest receivables | – | 6,955 | – | 6,955 | 6,955 |
| Cash and cash equivalents | – | 180,672 | – | 180,672 | 180,672 |
| | **1,307,608** | **205,751** | **–** | **1,513,359** | **1,513,359** |
| Other payables | **–** | **–** | **(458)** | **(458)** | **(458)** |

The carrying amounts of special issues of Singapore Government securities and advance deposits in the MediShield Life Fund approximate their fair values due to the investment arrangement with the Singapore Government as disclosed in note 20.3. The aggregate net fair values of recognised financial assets and liabilities which are not carried at fair value in the statements of net assets at 31 December are represented in the following table:

| | Amortised cost S$'000 | Other financial liabilities S$'000 | Total carrying amount S$'000 | Fair value S$'000 |
|---|---|---|---|---|
| **MediShield Life Fund** | | | | |
| **31 December 2018** | | | | |
| Investments | | | | |
| - special issues of Singapore Government securities | 6,886,500 | – | 6,886,500 | 6,886,500 |
| Other receivables | 76,455 | – | 76,455 | 76,455 |
| Interest receivables | 80,391 | – | 80,391 | 80,391 |
| Cash and cash equivalents | 53,936 | – | 53,936 | 53,936 |
| | **7,097,282** | **–** | **7,097,282** | **7,097,282** |
| Other payables | **–** | **(51,200)** | **(51,200)** | **(51,200)** |

| | Held-to-maturity S$'000 | Loans and receivables S$'000 | Other financial liabilities S$'000 | Total carrying amount S$'000 | Fair value S$'000 |
|---|---|---|---|---|---|
| **31 December 2017** | | | | | |
| Investments | | | | | |
| - special issues of Singapore Government securities | 5,716,000 | – | – | 5,716,000 | 5,716,000 |
| Other receivables | – | 64,880 | – | 64,880 | 64,880 |
| Interest receivables | – | 66,671 | – | 66,671 | 66,671 |
| Cash and cash equivalents | – | 33,170 | – | 33,170 | 33,170 |
| | **5,716,000** | **164,721** | **–** | **5,880,721** | **5,880,721** |
| Other payables | **–** | **–** | **(34,611)** | **(34,611)** | **(34,611)** |



The carrying amounts of special issues of Singapore Government securities and advance deposits in the Lifelong Income Fund approximate their fair values due to the investment arrangement with the Singapore Government as disclosed in note 20.3. The aggregate net fair values of recognised financial assets and liabilities which are not carried at fair value in the statements of net assets at 31 December are represented in the following table:

| | Amortised cost S$'000 | Other financial liabilities S$'000 | Total carrying amount S$'000 | Fair value S$'000 |
|---|---|---|---|---|
| **Lifelong Income Fund** | | | | |
| **31 December 2018** | | | | |
| Investments | | | | |
| - special issues of Singapore Government securities | 10,606,428 | – | 10,606,428 | 10,606,428 |
| - advance deposits | 447 | – | 447 | 447 |
| Interest receivables | 158,950 | – | 158,950 | 158,950 |
| Cash and cash equivalents | 10 | – | 10 | 10 |
| | **10,765,835** | **–** | **10,765,835** | **10,765,835** |
| Other payables | **–** | **(911)** | **(911)** | **(911)** |

| | Held-to-maturity S$'000 | Loans and receivables S$'000 | Other financial liabilities S$'000 | Total carrying amount S$'000 | Fair value S$'000 |
|---|---|---|---|---|---|
| **31 December 2017** | | | | | |
| Investments | | | | | |
| - special issues of Singapore Government securities | 10,125,543 | – | – | 10,125,543 | 10,125,543 |
| - advance deposits | 252 | – | – | 252 | 252 |
| Interest receivables | – | 150,699 | – | 150,699 | 150,699 |
| Cash and cash equivalents | – | 10 | – | 10 | 10 |
| | **10,125,795** | **150,709** | **–** | **10,276,504** | **10,276,504** |
| Other payables | **–** | **–** | **(725)** | **(725)** | **(725)** |

**Assets and liabilities measured at fair value**

| | 2018 Fair value measurements at the end of the year | | | |
|---|---|---|---|---|
| | **Level 1 S$'000** | **Level 2 S$'000** | **Level 3 S$'000** | **Total S$'000** |
| **Home Protection Fund** | | | | |
| **Recurring fair value measurements** | | | | |
| **Financial assets:** | | | | |
| **Financial assets measured at fair value** | | | | |
| Equity securities at FVTPL | 507,316 | 1 | – | 507,317 |
| Debt securities designated as FVTPL | 606,261 | 201,000 | – | 807,261 |
| Total financial assets through profit or loss | 1,113,577 | 201,001 | – | 1,314,578 |
| **Derivatives** | | | | |
| - Interest rate futures contracts | – | – | – | – |
| - Forward currency contracts | – | 10,241 | – | 10,241 |
| Total derivatives | – | 10,241 | – | 10,241 |
| **Financial assets as at 31 December 2018** | **1,113,577** | **211,242** | **–** | **1,324,819** |
| **Financial liabilities:** | | | | |
| **Derivatives** | | | | |
| - Interest rate futures contracts | – | – | – | – |
| - Forward currency contracts | – | (5,001) | – | (5,001) |
| **Financial liabilities as at 31 December 2018** | **–** | **(5,001)** | **–** | **(5,001)** |

| | 2017 Fair value measurements at the end of the year | | | |
|---|---|---|---|---|
| | **Level 1 S$'000** | **Level 2 S$'000** | **Level 3 S$'000** | **Total S$'000** |
| **Home Protection Fund** | | | | |
| **Recurring fair value measurements** | | | | |
| **Financial assets:** | | | | |
| **Financial assets through profit or loss** | | | | |
| Equity securities | 578,430 | 2,996 | – | 581,426 |
| Debt securities | 490,784 | 233,704 | – | 724,488 |
| Total financial assets through profit or loss | 1,069,214 | 236,700 | – | 1,305,914 |
| **Derivatives** | | | | |
| - Interest rate futures contracts | 194 | – | – | 194 |
| - Forward currency contracts | – | 5,139 | – | 5,139 |
| Total derivatives | 194 | 5,139 | – | 5,333 |
| **Financial assets as at 31 December 2017** | **1,069,408** | **241,839** | **–** | **1,311,247** |
| **Financial liabilities:** | | | | |
| **Derivatives** | | | | |
| - Interest rate futures contracts | (27) | – | – | (27) |
| - Forward currency contracts | – | (3,612) | – | (3,612) |
| **Financial liabilities as at 31 December 2017** | **(27)** | **(3,612)** | **–** | **(3,639)** |

**Level 2 fair value measurements**

The following is a description of the valuation techniques and inputs used in the fair value measurement for assets and liabilities that are categorised within Level 2 of the fair value hierarchy:

Debt securities

Debt securities are valued using either the Bloomberg Fair Value Model based on comparably rated bonds with similar characteristics i.e. currency, market type, industry type and credit rating or by evaluating U.S. Treasuries from reliable sources with sound historical accuracies.

Equity securities

Equity securities classified under the Level 2 pricing hierarchy are unquoted securities due to their trading status being unlisted, delisted, suspended, or warrants and rights, or illiquid owing to various types of corporate actions. The underlying securities are priced at the last bid price.

Derivatives

Interest rate swaps, interest rate options and currency swaps are used to manage interest rate exposures, hedge against exposure to exchange rate risks and manage volatility exposures.

Interest rate swap contracts are valued by applying forward pricing and swap models, using present value calculations. The models incorporate market observable inputs, including the credit quality of counterparties, foreign exchange spot rates, foreign exchange forward rates, interest rate curves and forward rate curves.

Credit default swaps are valued based on credit spread curves derived by market and details of the trades.

## 21. Net assets of Trust Funds

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| Deferment Bonus Fund | 21.1 | 836,556 | 831,946 |
| CPF LIFE Bonus Fund | 21.2 | 513,848 | 502,191 |
| Trust Fund for the Special Employment Credit Scheme | 21.3 | 694,437 | 915,863 |
| Other Trust Funds | 21.5 | 142,370 | 78,832 |
| | | **2,187,211** | **2,328,832** |

Details of the trust funds are set out below, have been prepared from the records of the trust funds, and reflect only transactions handled by the Board.



### 21.1 Deferment Bonus Fund

The Deferment Bonus Fund was set up and constituted under a trust deed in 2008 for the purpose of a scheme which provides for bonus payouts to help CPF members cope with the later drawdown age for the minimum sum and to encourage CPF members to voluntarily defer their drawdown age.

The Board is appointed as the trustee of the Deferment Bonus Fund, with effect from 29 June 2011, by the Government under the Deferment Bonus Fund Trust Deed and relevant Supplementary Deeds.

The Deferment Bonus Fund receives funds from the Government and interest income on advance deposits placed with the Accountant-General through the Monetary Authority of Singapore and pays Deferment Bonus and Voluntary Deferment Bonus to eligible CPF members, and operating expenses incurred for the administration of the Deferment Bonus Fund.

The trust period of the Deferment Bonus Fund ends on 31 January 2024. At the expiration of the trust period, all remaining assets of the fund shall be returned to the Government pursuant to the Deferment Bonus Fund Trust Deed.

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| **Fund balance** | | 836,556 | 831,946 |
| **Represented by:** | | | |
| Advance deposits with Monetary Authority of Singapore | | 836,556 | 831,946 |
| **Net assets** | 21 | **836,556** | **831,946** |
| **Receipts** | | | |
| Interest income | | 20,926 | 21,078 |
| **Disbursements** | | | |
| Payment of Deferment Bonus and Voluntary Deferment Bonus to members | | (15,725) | (26,527) |
| Agency fee paid to CPF Board | | (564) | (580) |
| Professional fees | | (27) | (16) |
| | | (16,316) | (27,123) |
| **Net receipts/(disbursements) during the year** | | 4,610 | (6,045) |
| Fund balance as at 1 January | | 831,946 | 837,991 |
| **Fund balance as at 31 December** | 21 | **836,556** | **831,946** |

### 21.2 CPF LIFE Bonus Fund

The CPF LIFE Bonus Fund was set up and constituted under a trust deed in 2009 for the purpose of helping eligible senior Singaporean citizens participate in the Lifelong Income Scheme by providing a bonus, paid into their CPF Retirement Accounts and/or as premiums for their CPF LIFE Annuity Plans.

The Board is appointed as the trustee of the CPF LIFE Bonus Fund, with effect from 29 June 2011, by the Government under the CPF LIFE Bonus Fund Trust Deed and relevant Supplementary Deeds.

The CPF LIFE Bonus Fund receives funds from the Government and interest income on advance deposits placed with the Accountant-General through the Monetary Authority of Singapore and pays CPF LIFE Bonus to eligible CPF members, and operating expenses incurred for the administration of the CPF LIFE Bonus Fund.

The trust period of the CPF LIFE Bonus Fund ends on 1 May 2020. At the expiration of the trust period, all remaining assets of the fund shall be returned to the Government pursuant to the CPF LIFE Bonus Fund Trust Deed.

| | Note | 2018<br>S$'000 | 2017<br>S$'000 |
|---|---|---|---|
| **Fund balance** | | 513,848 | 502,191 |
| **Represented by:** | | | |
| Advance deposits with Monetary Authority of Singapore | | 513,848 | 502,191 |
| **Net assets** | 21 | **513,848** | **502,191** |
| **Receipts** | | | |
| Interest income | | 12,631 | 12,773 |
| **Disbursements** | | | |
| Payment of CPF LIFE Bonus to members | | (129) | (17,782) |
| Agency fee paid to CPF Board | | (818) | (932) |
| Professional fees | | (27) | (16) |
| | | (974) | (18,730) |
| **Net receipts/(disbursements) during the year** | | 11,657 | (5,957) |
| Fund balance as at 1 January | | 502,191 | 508,148 |
| **Fund balance as at 31 December** | 21 | **513,848** | **502,191** |



### 21.3 Trust Fund for the Special Employment Credit Scheme

The Trust Fund for the Special Employment Credit Scheme was set up and constituted under a trust deed in 2012 for the purpose of a scheme which provides financial incentives to encourage employers to hire older Singaporean workers and to boost the employability of these older Singaporean workers.

The Board is appointed as the trustee of the Trust Fund for the Special Employment Credit Scheme with effect from 8 March 2012, by the Government under the Trust Deed to Trust Fund for the Special Employment Credit Scheme and relevant Supplementary Deeds.

From 1 April 2016 onwards, other than the operating cash float, all advance deposits were invested in special issues of Singapore Government securities placed with the Accountant-General through the Monetary Authority of Singapore.

The Trust Fund for the Special Employment Credit Scheme receives funds from the Government and interest income on special issues of Singapore Government Securities and pays Special Employment Credit to eligible beneficiaries, and operating expenses incurred for the scheme and administration of the Trust Fund for the Special Employment Credit Scheme.

The trust period of the Trust Fund for the Special Employment Credit Scheme is extended by three years to end on 31 August 2021, providing stronger support for employers hiring Singaporeans in the older age bands. At the expiration of the trust period, all remaining assets of the fund shall be returned to the Government pursuant to the Trust Deed to Trust Fund for the Special Employment Credit Scheme.

| | Note | 2018<br>S$'000 | 2017<br>S$'000 |
|---|---|---|---|
| **Fund balance** | | 694,437 | 915,863 |
| **Represented by:** | | | |
| Special issues of Singapore Government securities | | 692,266 | 913,190 |
| Cash | | 2,171 | 2,673 |
| **Net assets** | 21 | **694,437** | **915,863** |
| **Receipts** | | | |
| Funds from Government | | 160,000 | 275,000 |
| Interest income | | 10,027 | 11,520 |
| | | 170,027 | 286,520 |
| **Disbursements** | | | |
| Special Employment Credit disbursed | | (388,780) | (528,668) |
| Agency fee paid to CPF Board | | (2,641) | (2,800) |
| Professional fees | | (32) | (16) |
| | | (391,453) | (531,484) |
| **Net disbursements during the year** | | (221,426) | (244,964) |
| Fund balance as at 1 January | | 915,863 | 1,160,827 |
| **Fund balance as at 31 December** | 21 | **694,437** | **915,863** |

### 21.4 Trust Fund for the Workfare Special Bonus Scheme

The Trust Fund for the Workfare Special Bonus Scheme was set up and constituted under a trust deed in 2012 for the purpose of a scheme which provides a financial sum to older low-wage Singaporeans residing in Lower Value Properties as a bonus for engaging in regular and productive work.

The Board was appointed as the trustee of the Trust Fund for the Workfare Special Bonus Scheme with effect from 13 March 2012, by the Government under the Trust Deed to Trust Fund for the Workfare Special Bonus Scheme and relevant Supplementary Deeds.

From 1 April 2016 onwards, other than the operating cash float, all advance deposits were invested in special issues of Singapore Government securities placed with the Accountant-General through the Monetary Authority of Singapore.

The Trust Fund for the Workfare Special Bonus Scheme received funds from the Government and interest income on special issues of Singapore Government Securities and paid Workfare Special Bonus to eligible beneficiaries, and operating expenses incurred for the scheme and administration of the Trust Fund for the Workfare Special Bonus Scheme.

The trust period of the Trust Fund for the Workfare Special Bonus Scheme ended on 30 June 2017. Pursuant to the Trust Deed to Trust Fund for the Workfare Special Bonus Scheme, all remaining assets of the fund were returned to the Government as at 29 December 2017.

| | 2017 S$'000 |
|---|---|
| **Fund balance** | – |
| **Represented by:** | |
| Special issues of Singapore Government securities | – |
| Cash | – |
| **Net assets** | – |
| **Receipts** | |
| Interest income | 81 |
| **Disbursements** | |
| Workfare Special Bonus recovered | 32 |
| Agency fee paid to CPF Board | (133) |
| Professional fees | (37) |
| Funds returned to Government | (25,137) |
| | (25,275) |
| **Net disbursements during the year** | (25,194) |
| Fund balance as at 1 January | 25,194 |
| **Fund balance as at 31 December** | – |



### 21.5 Other Trust Funds

Other Trust Funds are set up to account for funds received from the Government which the Board acts as an administrator, and the funds are held in trust and managed by the Board on behalf of the respective Government ministries.

| | Note | 2018 S$'000 | 2017 S$'000 |
|---|---|---|---|
| **Fund balance** | | 142,370 | 78,832 |
| **Represented by:** | | | |
| Cash at banks held in trust by CPF Board | 7 | 142,370 | 78,832 |
| **Net assets** | 21 | **142,370** | **78,832** |
| **Receipts** | | | |
| Funds received from Government ministries | | 3,797,279 | 3,980,499 |
| Interest income | | 1,718 | 779 |
| | | 3,798,997 | 3,981,278 |
| **Disbursements** | | | |
| Disbursements to CPF members and the public | | (3,735,459) | (3,946,684) |
| **Net receipts during the year** | | 63,538 | 34,594 |
| Fund balance as at 1 January | | 78,832 | 44,238 |
| **Fund balance as at 31 December** | 21 | **142,370** | **78,832** |

### 22. Related party transactions

**Definition of related party**

The Board is a statutory board established under the CPF Act (Chapter 36, Revised Edition 2013). Government ministries including statutory boards under their purview are deemed related parties to the Board.

**Key management compensation**

Key management personnel of the Board are those persons having the authority and responsibility for planning, directing and controlling the activities of the Board. The core management of the Board are considered key management personnel.

Compensation of key management personnel comprises:

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| Salaries and other short-term employee benefits | 7,848 | 7,495 |
| CPF contributions | 368 | 369 |
| Post-employment benefits | 7 | 26 |

**Other related party transactions**

Other than disclosed elsewhere in the financial statements, the significant transactions with related parties based on terms agreed between the parties involved are as follows:

**Central Provident Fund**

**(i) Expenses incurred for services rendered**

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| Statutory boards | 11,841 | 8,191 |

**(ii) Agency fees income**

The Board handles agency work on behalf of various Government ministries. These agency income are included as part of agency, consultancy and data processing fees disclosed in note 13.

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| Government ministries | 75,723 | 67,366 |
| Statutory boards | 3,524 | 3,782 |

**(iii) Special issues of Singapore Government securities**

Transactions in special issues of Singapore Government securities are as follows:

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| Net placement | 30,417,972 | 29,906,369 |

**Insurance Funds**

**(iv) Trading of debt securities**

Trading of debt securities issued by the Singapore Government and Government ministries are as follows:

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| **Home Protection Fund** | | |
| Sales | 169,173 | 45,447 |
| Purchases | 167,972 | 42,237 |

**(v) Special issues of Singapore Government securities**

Transactions in special issues of Singapore Government securities are as follows:

| | 2018 S$'000 | 2017 S$'000 |
|---|---|---|
| **Lifelong Income Fund** | | |
| Net placement | 480,885 | 504,639 |
| **MediShield Life Fund** | | |
| Net placement | 1,170,500 | 1,284,000 |

**23. Explanation of adoption of new standards**

The Board adopted SB-FRS 109 *Financial Instruments* and SB-FRS 115 *Revenue from Contracts with Customers* from 1 January 2018.

Other than SB-FRS 109, the adoption of the above standards and interpretations do not have a material effect on the financial statements.

<u>SB-FRS 109 *Financial Instruments*</u>

SB-FRS 109 sets out requirements for recognising and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. It also introduces a new ECL model.

As a result of the adoption of SB-FRS 109, the Board has adopted consequential amendments to SB-FRS 107 *Financial Instruments: Disclosures* that are applied to disclosures about 2018 but have not been generally applied to comparative information.

The Board has used an exemption allowed in SB-FRS 109 on not restating comparative information for prior periods with respect to classification and measurement (including impairment) requirements. Differences in the carrying amounts of financial assets and financial liabilities resulting from the adoption of SB-FRS 109 were recognised as an adjustment to the accumulated surplus and fair value reserve as at 1 January 2018 (see note 17). Accordingly, the information presented for 2017 does not generally reflect the requirements of SB-FRS 109, but rather those of SB-FRS 39 Financial Instruments: Recognition and Measurement.

The following assessments have been made on the basis of the facts and circumstances that existed at 1 January 2018:

- The determination of the business model within which a financial asset is held;
- The determination of whether the contractual terms of a financial asset give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding;
- The designation and revocation of previous designations of certain financial assets and financial liabilities as measured at FVTPL; and
- The designation of an equity instrument that is not held for trading as FVOCI.

If a debt investment had low credit risk at the date of initial application of SB-FRS 109, then the Board has assumed that the credit risk on the asset had not increased significantly since its initial recognition.

Details of how the Board classifies and measures financial assets and related gains and losses under SB-FRS 109 are disclosed in note 2.11.

The adoption of SB-FRS 109 does not have a significant effect on the Board's accounting policies for financial liabilities.

**(i) Classification and measurement of financial assets and financial liabilities**

Under SB-FRS 109, financial assets are classified in the following categories: measured at amortised cost, FVOCI – debt instrument, FVOCI – equity instrument or FVTPL. The classification of financial assets under SB-FRS 109 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. SB-FRS 109 eliminates the previous classifications under SB-FRS 39: held-to-maturity, loans and receivables and available-for-sale.

SB-FRS 109 largely retains the existing requirements in SB-FRS 39 for the classification and measurement of financial liabilities. The adoption of SB-FRS 109 does not have a significant effect on the Board's accounting policies for financial liabilities.

The following table below shows the original measurement categories under SB-FRS 39 and the new measurement categories under SB-FRS 109 for each class of the Board's financial assets as at 1 January 2018.

| | | | | As at 1 January 2018 | |
|---|---|---|---|---|---|
| | **Note** | **Original classification under SB-FRS 39** | **New classification under SB-FRS 109** | **Original carrying amount under SB-FRS 39 S$'000** | **New carrying amount under SB-FRS 109 S$'000** |
| **Central Provident Fund** | | | | | |
| **Financial assets** | | | | | |
| Special issues of Singapore Government securities | (a) | Held-to-maturity | Amortised cost | 344,344,329 | 344,344,329 |
| Advance deposits | (a) | Held-to-maturity | Amortised cost | 11,545,646 | 11,545,646 |
| Singapore Government securities | (b) | Available-for-sale | FVOCI – Debt instruments | 490,363 | 490,363 |
| Statutory Board bonds | (b) | Available-for-sale | FVOCI – Debt instruments | 259,174 | 259,174 |
| Corporate bonds | (b) | Available-for-sale | FVOCI – Debt instruments | 1,377,690 | 1,377,690 |
| Corporate bonds | (c) | Available-for-sale | FVTPL | 138,621 | 138,621 |
| Equity securities | (d) | Available-for-sale | FVOCI – Equity instruments | 653,523 | 653,523 |
| Debtor and other receivables | (e) | Loans and receivables | Amortised cost | 3,865,530 | 3,865,530 |
| Cash and cash equivalents | (e) | Loans and receivables | Amortised cost | 309,714 | 309,714 |
| **Total financial assets** | | | | 362,984,590 | 362,984,590 |
| **Home Protection Fund** | | | | | |
| **Financial assets** | | | | | |
| Debt securities | | Designated as FVTPL | Designated as FVTPL | 724,488 | 724,488 |
| Equity securities | (f) | Designated as FVTPL | FVTPL | 581,426 | 581,426 |
| Derivatives | | Fair value | FVTPL | 1,694 | 1,694 |
| Other receivables | (e) | Loans and receivables | Amortised cost | 18,124 | 18,124 |
| Interest receivables | (e) | Loans and receivables | Amortised cost | 6,955 | 6,955 |
| Cash and cash equivalents | (e) | Loans and receivables | Amortised cost | 180,672 | 180,672 |
| **Total financial assets** | | | | 1,513,359 | 1,513,359 |

| | Note | Original classification under SB-FRS 39 | New classification under SB-FRS 109 | As at 1 January 2018 Original carrying amount under SB-FRS 39 S$'000 | New carrying amount under SB-FRS 109 S$'000 |
|---|---|---|---|---|---|
| **MediShield Life Fund** | | | | | |
| **Financial assets** | | | | | |
| Special issues of Singapore | | | | | |
| Government securities | (a) | Held-to-maturity | Amortised cost | 5,716,000 | 5,716,000 |
| Other receivables | (e) | Loans and receivables | Amortised cost | 64,880 | 64,880 |
| Interest receivables | (e) | Loans and receivables | Amortised cost | 66,671 | 66,671 |
| Cash and cash equivalents | (e) | Loans and receivables | Amortised cost | 33,170 | 33,170 |
| **Total financial assets** | | | | 5,880,721 | 5,880,721 |
| **Lifelong Income Fund** | | | | | |
| **Financial assets** | | | | | |
| Special issues of Singapore | | | | | |
| Government securities | (a) | Held-to-maturity | Amortised cost | 10,125,543 | 10,125,543 |
| Advance deposits | (a) | Held-to-maturity | Amortised cost | 252 | 252 |
| Interest receivables | (e) | Loans and receivables | Amortised cost | 150,699 | 150,699 |
| Cash and cash equivalent | (e) | Loans and receivables | Amortised cost | 10 | 10 |
| **Total financial assets** | | | | 10,276,504 | 10,276,504 |

(a) Special issues of Singapore Government securities and advance deposits are held to collect contractual cash flows and these cash flows consist solely of payments of principal and interest on the principal amount outstanding. Accordingly, these investments are classified as financial assets at amortised cost under SB-FRS 109.

(b) The debt investments' contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. The Board considers these debt investments are held within a business model whose objective is achieved both by collecting contractual cash flows and by selling securities, these assets have therefore been classified as FVOCI.

(c) Corporate perpetual bonds were classified and measured as financial assets at FVTPL.

(d) Equity investments which the Board intend to hold for long term for strategic purposes, and have been designated as FVOCI.

(e) Cash and cash equivalents, interest receivables, debtors and other receivables that were classified as loans and receivables under SB-FRS 39 are now classified at amortised cost.

(f) Under SB-FRS 39, these equity investments were designated as FVTPL because this designation eliminates or significantly reduces the accounting mismatch that would otherwise arise from measuring assets and liabilities or recognising the gains or losses on them on different bases. They are now classified as financial assets at FVTPL under SB-FRS 109.



**(ii) Impairment of financial assets**

SB-FRS 109 replaces the 'incurred loss' model in SB-FRS 39 with an ECL model. The new impairment model applies to financial assets measured at amortised cost and debt investments at FVOCI, but not to equity investments.

Under SB-FRS 109, loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of the assets. For debt investments at FVOCI, the loss allowance is recognised in the statement of changes in fund balances. Based upon the analysis performed, the application of ECL model does not have material impact on each class of financial assets.

**(iii) Transition impact**

The following table summarises the impact of transition to SB-FRS 109 on the fair value reserve and the accumulated surplus at 1 January 2018:

| | Impact of adopting SB-FRS 109 at 1 January 2018 $'000 |
|---|---|
| **Fair value reserve** | |
| Closing balance under SB-FRS 39 (31 December 2017) | 112,296 |
| Transfer of unrealised gain of corporate bonds to accumulated surplus | (3,471) |
| Opening balance under SB-FRS 109 (1 January 2018) | 108,825 |
| **Accumulated surplus** | |
| Closing balance under SB-FRS 39 (31 December 2017) | 3,053,092 |
| Transfer of unrealised gain of corporate bonds from fair value reserve | 3,471 |
| Opening balance under SB-FRS 109 (1 January 2018) | 3,056,563 |

**24. Authorisation of financial statements for issue**

The financial statements for the year ended 31 December 2018 were authorised for issue by the members of the Board on 8 May 2019.

# Annexes

# ANNEX A

## RATES OF CPF CONTRIBUTIONS, 1955 – 2018

| STARTING | AGE OF EMPLOYEE | CONTRIBUTION RATE (% of wage) | | CREDITED INTO (% of wage) | | | TOTAL (% of wage) | ORDINARY WAGE CEILING ($) |
|---|---|---|---|---|---|---|---|---|
| | | BY EMPLOYER | BY EMPLOYEE | ORDINARY ACCOUNT | SPECIAL ACCOUNT | MEDISAVE ACCOUNT | | |
| Jul 1955 | - | 5 | 5 | - | - | - | 10 | 500 |
| Sep 1968 | - | 6.5 | 6.5 | - | - | - | 13 | 2,307.69 |
| Jan 1970 | - | 8 | 8 | - | - | - | 16 | 1,875 |
| Jan 1971 | - | 10 | 10 | - | - | - | 20 | 1,500 |
| Jul 1972 | - | 14 | 10 | - | - | - | 24 | |
| Jul 1973 | - | 15 | 11 | - | - | - | 26 | |
| Jul 1974 | - | 15 | 15 | - | - | - | 30 | |
| Jul 1975 | - | 15 | 15 | - | - | - | 30 | 2,000 |
| Jul 1977 | - | 15.5 | 15.5 | 30 | 1 | - | 31 | |
| Jul 1978 | - | 16.5 | 16.5 | 30 | 3 | - | 33 | 3,000 |
| Jul 1979 | - | 20.5 | 16.5 | 30 | 7 | - | 37 | |
| Jul 1980 | - | 20.5 | 18 | 32 | 6.5 | - | 38.5 | |
| Jul 1981 | - | 20.5 | 22 | 38.5 | 4 | - | 42.5 | |
| Jul 1982 | - | 22 | 23 | 40 | 5 | - | 45 | |
| Jul 1983 | - | 23 | 23 | 40 | 6 | - | 46 | |
| Nov 1983 | - | 23 | 23 | 40 | 6 | - | 46 | 4,000 |
| Apr 1984 | - | 23 | 23 | 40 | - | 6 | 46 | |
| Jul 1984 | - | 25 | 25 | 40 | 4 | 6 | 50 | 5,000 |
| Jul 1985 | - | 25 | 25 | 40 | 4 | 6 | 50 | 6,000 |
| Apr 1986 | - | 10 | 25 | 29 | - | 6 | 35 | |
| Jul 1988 | 55 years & below | 12 | 24 | 30 | - | 6 | 36 | 6,000 |
| | Above 55 – 60 years | 11 | 20 | 25 | - | 6 | 31 | |
| | Above 60 – 65 years | 9 | 19 | 22 | - | 6 | 28 | |
| | Above 65 years | 8 | 18 | 20 | - | 6 | 26 | |
| Jul 1989 | 55 years & below | 15 | 23 | 30 | 2 | 6 | 38 | 6,000 |
| | Above 55 – 60 years | 12 | 16 | 22 | - | 6 | 28 | |
| | Above 60 – 65 years | 8 | 13 | 15 | - | 6 | 21 | |
| | Above 65 years | 6 | 11 | 11 | - | 6 | 17 | |
| Jul 1990 | 55 years & below | 16.5 | 23 | 30 | 3.5 | 6 | 39.5 | 6,000 |
| | Above 55 – 60 years | 12.5 | 12.5 | 19 | - | 6 | 25 | |
| | Above 60 – 65 years | 7.5 | 7.5 | 9 | - | 6 | 15 | |
| | Above 65 years | 5 | 5 | 4 | - | 6 | 10 | |
| Jul 1991 | 55 years & below | 17.5 | 22.5 | 30 | 4 | 6 | 40 | 6,000 |
| | Above 55 – 60 years | 12.5 | 12.5 | 19 | - | 6 | 25 | |
| | Above 60 – 65 years | 7.5 | 7.5 | 9 | - | 6 | 15 | |
| | Above 65 years | 5 | 5 | 4 | - | 6 | 10 | |

| STARTING | AGE OF EMPLOYEE | CONTRIBUTION RATE (% of wage) | | CREDITED INTO (% of wage) | | | TOTAL (% of wage) | ORDINARY WAGE CEILING ($) |
|---|---|---|---|---|---|---|---|---|
| | | BY EMPLOYER | BY EMPLOYEE | ORDINARY ACCOUNT | SPECIAL ACCOUNT | MEDISAVE ACCOUNT | | |
| Jul 1992 | 35 years & below | 18 | 22 | 30 | 4 | 6 | 40 | 6,000 |
| | Above 35 – 55 years | 18 | 22 | 29 | 4 | 7 | 40 | |
| | Above 55 – 60 years | 12.5 | 12.5 | 18 | - | 7 | 25 | |
| | Above 60 – 65 years | 7.5 | 7.5 | 8 | - | 7 | 15 | |
| | Above 65 years | 5 | 5 | 3 | - | 7 | 10 | |
| Jul 1993 | 35 years & below | 18.5 | 21.5 | 30 | 4 | 6 | 40 | 6,000 |
| | Above 35 – 45 years | 18.5 | 21.5 | 29 | 4 | 7 | 40 | |
| | Above 45 – 55 years | 18.5 | 21.5 | 28 | 4 | 8 | 40 | |
| | Above 55 – 60 years | 7.5 | 12.5 | 12 | - | 8 | 20 | |
| | Above 60 – 65 years | 7.5 | 7.5 | 7 | - | 8 | 15 | |
| | Above 65 years | 5 | 5 | 2 | - | 8 | 10 | |
| Jul 1994 | 35 years & below | 20 | 20 | 30 | 4 | 6 | 40 | 6,000 |
| | Above 35 – 45 years | 20 | 20 | 29 | 4 | 7 | 40 | |
| | Above 45 – 55 years | 20 | 20 | 28 | 4 | 8 | 40 | |
| | Above 55 – 60 years | 7.5 | 12.5 | 12 | - | 8 | 20 | |
| | Above 60 – 65 years | 7.5 | 7.5 | 7 | - | 8 | 15 | |
| | Above 65 years | 5 | 5 | 2 | - | 8 | 10 | |
| Jan 1999 | 35 years & below | 10 | 20 | 24 | - | 6 | 30 | 6,000 |
| | Above 35 – 45 years | 10 | 20 | 23 | - | 7 | 30 | |
| | Above 45 – 55 years | 10 | 20 | 22 | - | 8 | 30 | |
| | Above 55 – 60 years | 4 | 12.5 | 8.5 | - | 8 | 16.5 | |
| | Above 60 – 65 years | 2 | 7.5 | 1.5 | - | 8 | 9.5 | |
| | Above 65 years | 2 | 5 | - | - | 7 | 7 | |
| Apr 2000 | 35 years & below | 12 | 20 | 24 | 2 | 6 | 32 | 6,000 |
| | Above 35 – 45 years | 12 | 20 | 23 | 2 | 7 | 32 | |
| | Above 45 – 55 years | 12 | 20 | 22 | 2 | 8 | 32 | |
| | Above 55 – 60 years | 4.5 | 12.5 | 9 | - | 8 | 17 | |
| | Above 60 – 65 years | 2.5 | 7.5 | 2 | - | 8 | 10 | |
| | Above 65 years | 2.5 | 5 | - | - | 7.5 | 7.5 | |
| Jan 2001 | 35 years & below | 16 | 20 | 26 | 4 | 6 | 36 | 6,000 |
| | Above 35 – 45 years | 16 | 20 | 23 | 6 | 7 | 36 | |
| | Above 45 – 55 years | 16 | 20 | 22 | 6 | 8 | 36 | |
| | Above 55 – 60 years | 6 | 12.5 | 10.5 | - | 8 | 18.5 | |
| | Above 60 – 65 years | 3.5 | 7.5 | 2.5 | - | 8.5 | 11 | |
| | Above 65 years | 3.5 | 5 | - | - | 8.5 | 8.5 | |
| Oct 2002 | 35 years & below | 16 | 20 | 26 | 4 | 6 | 36 | 6,000 |
| | Above 35 – 45 years | 16 | 20 | 23 | 6 | 7 | 36 | |
| | Above 45 – 55 years | 16 | 20 | 22 | 6 | 8 | 36 | |
| | Above 55 – 60 years | 6 | 12.5 | 10.5 | - | 8 | 18.5 | |
| | Above 60 – 65 years | 3.5 | 7.5 | 2.5 | - | 8.5 | 11 | |
| | Above 65 years | 3.5 | 5 | - | - | 8.5 | 8.5 | |

| STARTING | AGE OF EMPLOYEE | CONTRIBUTION RATE (% of wage) | | CREDITED INTO (% of wage) | | | TOTAL (% of wage) | ORDINARY WAGE CEILING ($) |
|---|---|---|---|---|---|---|---|---|
| | | BY EMPLOYER | BY EMPLOYEE | ORDINARY ACCOUNT | SPECIAL ACCOUNT | MEDISAVE ACCOUNT | | |
| Oct 2003 | 35 years & below | 13 | 20 | 22 | 5 | 6 | 33 | 6,000 |
| | Above 35 – 45 years | 13 | 20 | 20 | 6 | 7 | 33 | |
| | Above 45 – 55 years | 13 | 20 | 18 | 7 | 8 | 33 | |
| | Above 55 – 60 years | 6 | 12.5 | 10.5 | - | 8 | 18.5 | |
| | Above 60 - 65 years | 3.5 | 7.5 | 2.5 | - | 8.5 | 11 | |
| | Above 65 years | 3.5 | 5 | - | - | 8.5 | 8.5 | |
| Jan 2004 | 35 years & below | 13 | 20 | 22 | 5 | 6 | 33 | 5,500 |
| | Above 35 – 45 years | 13 | 20 | 20 | 6 | 7 | 33 | |
| | Above 45 – 55 years | 13 | 20 | 18 | 7 | 8 | 33 | |
| | Above 55 – 60 years | 6 | 12.5 | 10.5 | - | 8 | 18.5 | |
| | Above 60 – 65 years | 3.5 | 7.5 | 2.5 | - | 8.5 | 11 | |
| | Above 65 years | 3.5 | 5 | - | - | 8.5 | 8.5 | |
| Jan 2005 | 35 years & below | 13 | 20 | 22 | 5 | 6 | 33 | 5,000 |
| | Above 35 – 45 years | 13 | 20 | 20 | 6 | 7 | 33 | |
| | Above 45 – 50 years | 13 | 20 | 18 | 7 | 8 | 33 | |
| | Above 50 – 55 years | 11 | 19 | 15 | 7 | 8 | 30 | |
| | Above 55 – 60 years | 6 | 12.5 | 10.5 | - | 8 | 18.5 | |
| | Above 60 – 65 years | 3.5 | 7.5 | 2.5 | - | 8.5 | 11 | |
| | Above 65 years | 3.5 | 5 | - | - | 8.5 | 8.5 | |
| Jan 2006 | 35 years & below | 13 | 20 | 22 | 5 | 6 | 33 | 4,500 |
| | Above 35 – 45 years | 13 | 20 | 20 | 6 | 7 | 33 | |
| | Above 45 – 50 years | 13 | 20 | 18 | 7 | 8 | 33 | |
| | Above 50 – 55 years | 9 | 18 | 12 | 7 | 8 | 27 | |
| | Above 55 – 60 years | 6 | 12.5 | 10.5 | - | 8 | 18.5 | |
| | Above 60 – 65 years | 3.5 | 7.5 | 2.5 | - | 8.5 | 11 | |
| | Above 65 years | 3.5 | 5 | - | - | 8.5 | 8.5 | |
| Jul 2007 | 35 years & below | 14.5 | 20 | 23 | 5 | 6.5 | 34.5 | 4,500 |
| | Above 35 – 45 years | 14.5 | 20 | 21 | 6 | 7.5 | 34.5 | |
| | Above 45 – 50 years | 14.5 | 20 | 19 | 7 | 8.5 | 34.5 | |
| | Above 50 – 55 years | 10.5 | 18 | 13 | 7 | 8.5 | 28.5 | |
| | Above 55 – 60 years | 7.5 | 12.5 | 11.5 | - | 8.5 | 20 | |
| | Above 60 – 65 years | 5 | 7.5 | 3.5 | - | 9 | 12.5 | |
| | Above 65 years | 5 | 5 | 1 | - | 9 | 10 | |
| Sep 2010 | 35 years & below | 15 | 20 | 23 | 5 | 7 | 35 | 4,500 |
| | Above 35 – 45 years | 15 | 20 | 21 | 6 | 8 | 35 | |
| | Above 45 – 50 years | 15 | 20 | 19 | 7 | 9 | 35 | |
| | Above 50 – 55 years | 11 | 18 | 13 | 7 | 9 | 29 | |
| | Above 55 – 60 years | 8 | 12.5 | 11.5 | - | 9 | 20.5 | |
| | Above 60 – 65 years | 5.5 | 7.5 | 3.5 | - | 9.5 | 13 | |
| | Above 65 years | 5.5 | 5 | 1 | - | 9.5 | 10.5 | |



| STARTING | AGE OF EMPLOYEE | CONTRIBUTION RATE (% of wage) | | CREDITED INTO (% of wage) | | | TOTAL (% of wage) | ORDINARY WAGE CEILING ($) |
|---|---|---|---|---|---|---|---|---|
| | | BY EMPLOYER | BY EMPLOYEE | ORDINARY ACCOUNT | SPECIAL ACCOUNT | MEDISAVE ACCOUNT | | |
| Mar 2011 | 35 years & below | 15.5 | 20 | 23 | 5.5 | 7 | 35.5 | 4,500 |
| | Above 35 – 45 years | 15.5 | 20 | 21 | 6.5 | 8 | 35.5 | |
| | Above 45 – 50 years | 15.5 | 20 | 19 | 7.5 | 9 | 35.5 | |
| | Above 50 – 55 years | 11.5 | 18 | 13 | 7.5 | 9 | 29.5 | |
| | Above 55 – 60 years | 8.5 | 12.5 | 11.5 | 0.5 | 9 | 21 | |
| | Above 60 – 65 years | 6 | 7.5 | 3.5 | 0.5 | 9.5 | 13.5 | |
| | Above 65 years | 6 | 5 | 1 | 0.5 | 9.5 | 11 | |
| Sep 2011 | 35 years & below | 16 | 20 | 23 | 6 | 7 | 36 | 5,000 |
| | Above 35 – 45 years | 16 | 20 | 21 | 7 | 8 | 36 | |
| | Above 45 – 50 years | 16 | 20 | 19 | 8 | 9 | 36 | |
| | Above 50 – 55 years | 12 | 18 | 13 | 8 | 9 | 30 | |
| | Above 55 – 60 years | 9 | 12.5 | 11.5 | 1 | 9 | 21.5 | |
| | Above 60 – 65 years | 6.5 | 7.5 | 3.5 | 1 | 9.5 | 14 | |
| | Above 65 years | 6.5 | 5 | 1 | 1 | 9.5 | 11.5 | |
| Sep 2012 | 35 years & below | 16 | 20 | 23 | 6 | 7 | 36 | 5,000 |
| | Above 35 – 45 years | 16 | 20 | 21 | 7 | 8 | 36 | |
| | Above 45 – 50 years | 16 | 20 | 19 | 8 | 9 | 36 | |
| | Above 50 – 55 years | 14 | 18.5 | 13.5 | 9.5 | 9.5 | 32.5 | |
| | Above 55 – 60 years | 10.5 | 13 | 12 | 2 | 9.5 | 23.5 | |
| | Above 60 – 65 years | 7 | 7.5 | 3.5 | 1.5 | 9.5 | 14.5 | |
| | Above 65 years | 6.5 | 5 | 1 | 1 | 9.5 | 11.5 | |
| Jan 2014 | 35 years & below | 16 | 20 | 23 | 6 | 7 | 36 | 5,000 |
| | Above 35 – 45 years | 16 | 20 | 21 | 7 | 8 | 36 | |
| | Above 45 – 50 years | 16 | 20 | 19 | 8 | 9 | 36 | |
| | Above 50 – 55 years | 14 | 18.5 | 13.5 | 9.5 | 9.5 | 32.5 | |
| | Above 55 – 60 years | 10.5 | 13 | 12 | 2 | 9.5 | 23.5 | |
| | Above 60 – 65 years | 7 | 7.5 | 3.5 | 1.5 | 9.5 | 14.5 | |
| | Above 65 years | 6.5 | 5 | 1 | 1 | 9.5 | 11.5 | |
| Jan 2015 | 35 years & below | 17 | 20 | 23 | 6 | 8 | 37 | 5,000 |
| | Above 35 – 45 years | 17 | 20 | 21 | 7 | 9 | 37 | |
| | Above 45 – 50 years | 17 | 20 | 19 | 8 | 10 | 37 | |
| | Above 50 – 55 years | 16 | 19 | 14 | 10.5 | 10.5 | 35 | |
| | Above 55 – 60 years | 12 | 13 | 12 | 2.5 | 10.5 | 25 | |
| | Above 60 – 65 years | 8.5 | 7.5 | 3.5 | 2 | 10.5 | 16 | |
| | Above 65 years | 7.5 | 5 | 1 | 1 | 10.5 | 12.5 | |
| Jan 2016* | 35 years & below | 17 | 20 | 23 | 6 | 8 | 37 | 6,000 |
| | Above 35 – 45 years | 17 | 20 | 21 | 7 | 9 | 37 | |
| | Above 45 – 50 years | 17 | 20 | 19 | 8 | 10 | 37 | |
| | Above 50 – 55 years | 17 | 20 | 15 | 11.5 | 10.5 | 37 | |
| | Above 55 – 60 years | 13 | 13 | 12 | 3.5 | 10.5 | 26 | |
| | Above 60 – 65 years | 9 | 7.5 | 3.5 | 2.5 | 10.5 | 16.5 | |
| | Above 65 years | 7.5 | 5 | 1 | 1 | 10.5 | 12.5 | |

* Contribution and allocation rates for employees with monthly wages of $750 or more. For employees with monthly wages of less than $750, please refer to Annex D for the CPF contribution rates.

# ANNEX B

## CPF INTEREST RATES, 2009 – 2018

| YEAR | CPF INTEREST RATE PER ANNUM (%) | | | |
|---|---|---|---|---|
| | ORDINARY ACCOUNT | MEDISAVE ACCOUNT | SPECIAL ACCOUNT | RETIREMENT ACCOUNT |
| Jan – Dec 2009 | 2.50 | 4.00 | 4.00 | 4.00 |
| Jan – Dec 2010 | 2.50 | 4.00 | 4.00 | 4.00 |
| Jan – Dec 2011 | 2.50 | 4.00 | 4.00 | 4.00 |
| Jan – Dec 2012 | 2.50 | 4.00 | 4.00 | 4.00 |
| Jan – Dec 2013 | 2.50 | 4.00 | 4.00 | 4.00 |
| Jan – Dec 2014 | 2.50 | 4.00 | 4.00 | 4.00 |
| Jan – Dec 2015 | 2.50 | 4.00 | 4.00 | 4.00 |
| Jan – Dec 2016 | 2.50 | 4.00 | 4.00 | 4.00 |
| Jan – Dec 2017 | 2.50 | 4.00 | 4.00 | 4.00 |
| Jan – Dec 2018 | 2.50 | 4.00 | 4.00 | 4.00 |



# ANNEX C

## MEMBERSHIP, CONTRIBUTIONS & MEMBERS' BALANCES, 2009 – 2018

| YEAR END | NUMBER OF MEMBERS ('000) | TOTAL CONTRIBUTION ($'000) | TOTAL BALANCES ($'000) |
|---|---|---|---|
| 2009 | 3,291 | 20,124,892 | 166,804,016 |
| 2010 | 3,343 | 21,992,739 | 185,887,975 |
| 2011 | 3,376 | 24,628,413 | 207,545,500 |
| 2012 | 3,419 | 26,048,399 | 230,157,671 |
| 2013 | 3,508 | 28,530,047 | 252,968,636 |
| 2014 | 3,593 | 29,722,128 | 275,363,930 |
| 2015 | 3,686 | 32,049,136 | 299,522,383 |
| 2016 | 3,761 | 35,851,675 | 328,895,282 |
| 2017 | 3,835 | 37,284,717 | 359,514,581 |
| 2018 | 3,908 | 38,368,993 | 391,117,517 |

# ANNEX D

## CPF CONTRIBUTIONS IN RESPECT OF PRIVATE SECTOR EMPLOYEES (FROM 1 JANUARY 2016)

| Employee's total wages for the calendar month | AGE OF EMPLOYEE | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 55 YEARS AND BELOW | | ABOVE 55 – 60 | | ABOVE 60 – 65 | | ABOVE 65 | |
| | Total CPF contributions (Employer's share & Employee's share) for the calendar month | Employee's share of CPF contributions for the calendar month | | | | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| ≤ $50 | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil |
| > $50 to $500 | 17% of the employee's total wages for the month | Nil | 13% | Nil | 9% | Nil | 7.5% | Nil |
| > $500 to < $750 | a. 17% of the employee's total wages for the month; and | a. Nil | 13% | Nil | 9% | Nil | 7.5% | Nil |
| | b. 0.6 of the difference between the employee's total wages for the month and $500 | b. 0.6 of the difference between the employee's total wages for the month and $500 | 0.39 | 0.39 | 0.225 | 0.225 | 0.15 | 0.15 |
| ≥ $750 | a. 37% of the employee's Ordinary Wages for the month up to $2,220; and | a. 20% of the employee's Ordinary Wages for the month up to $1,200; and | 26% max $1,560 | 13% max $780 | 16.5% max $990 | 7.5% max $450 | 12.5% max $750 | 5% max $300 |
| | b. 37% of the Additional Wages payable to the employee in the month | b. 20% of the Additional Wages payable to the employee in the month | 26% | 13% | 16.5% | 7.5% | 12.5% | 5% |

For employees in the above 55 to 60, above 60 to 65 and above 65 age groups, replace the figures underlined in columns (2) and (3) with the corresponding figures in columns (4) to (9).

# ANNEX E

## CPF CONTRIBUTIONS IN RESPECT OF GOVERNMENT PENSIONABLE EMPLOYEES AND PENSIONABLE EMPLOYEES IN DESIGNATED STATUTORY BODIES (FROM 1 JANUARY 2016)

| Employee's total wages for the calendar month | AGE OF EMPLOYEE | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 55 YEARS AND BELOW | | ABOVE 55 – 60 | | ABOVE 60 – 65 | | ABOVE 65 | |
| | Total CPF contributions (Employer's share & Employee's share) for the calendar month | Employee's share of CPF contributions for the calendar month | | | | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| > $0.01 | a. 12.75% of the employee's Ordinary Wages excluding the non-pensionable variable payment and non-pensionable component; and | a. Nil | 9.75% | Nil | 6.75% | Nil | 5.625% | Nil |
| | 17% of the non-pensionable variable payment and non-pensionable component for the month subject to a maximum of $1,020; and | Nil | 13% max $780 | Nil | 9% max $540 | Nil | 7.5% max $450 | Nil |
| | b. a further 15% of the employee's Ordinary Wages excluding the non-pensionable variable payment and non-pensionable component; and | b. 15% of the employee's Ordinary Wages excluding the non-pensionable variable payment and non-pensionable component; and | 9.75% | 9.75% | 5.625% | 5.625% | 3.75% | 3.75% |
| | 20% of the non-pensionable variable payment and non-pensionable component for the month subject to a maximum of $1,200; and | 20% of the non-pensionable variable payment and non-pensionable component for the month subject to a maximum of $1,200; and | 13% max $780 | 13% max $780 | 7.5% max $450 | 7.5% max $450 | 5% max $300 | 5% max $300 |
| | c. 37% of any Additional Wages payable | c. 20% of any Additional Wages payable | 26% | 13% | 16.5% | 7.5% | 12.5% | 5% |

For employees in the above 55 to 60, above 60 to 65 and above 65 age groups, replace the figures underlined in columns (2) & (3) with the corresponding figures in columns (4) to (9).

# ANNEX F

## CPF CONTRIBUTIONS IN RESPECT OF GOVERNMENT NON-PENSIONABLE EMPLOYEES AND NON-PENSIONABLE EMPLOYEES IN DESIGNATED STATUTORY BODIES AND AIDED SCHOOLS (FROM 1 JANUARY 2016)

| Employee's total wages for the calendar month | AGE OF EMPLOYEE | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 55 YEARS AND BELOW | | ABOVE 55 – 60 | | ABOVE 60 – 65 | | ABOVE 65 | |
| | Total CPF contributions (Employer's share & Employee's share) for the calendar month | Employee's share of CPF contributions for the calendar month | | | | | | |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| ≤ $50 | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil |
| > $50 to $500 | 17% of the employee's total wages for the month | Nil | 13% | Nil | 9% | Nil | 7.5% | Nil |
| > $500 to < $750 | a. 17% of the employee's total wages for the month; and | a. Nil | 13% | Nil | 9% | Nil | 7.5% | Nil |
| | b. 0.6 of the difference between the employee's total wages for the month and $500 | b. 0.6 of the difference between the employee's total wages for the month and $500 | 0.39 | 0.39 | 0.225 | 0.225 | 0.15 | 0.15 |
| ≥ $750 | a. 37% of the employee's Ordinary Wages for the month up to $2,220; and | a. 20% of the employee's Ordinary Wages for the month up to $1,200; and | 26% max $1,560 | 13% max $780 | 16.5% max $990 | 7.5% max $450 | 12.5% max $750 | 5% max $300 |
| | b. 37% of the Additional Wages payable to the employee in the month | b. 20% of the Additional Wages payable to the employee in the month | 26% | 13% | 16.5% | 7.5% | 12.5% | 5% |

For employees in the above 55 to 60, above 60 to 65 and above 65 age groups, replace the figures underlined in columns (2) and (3) with the corresponding figures in columns (4) to (9).

# ANNEX G

## WITHDRAWALS UNDER SECTION 15 AND SECTION 25 OF THE CPF ACT 2018

| GROUND FOR WITHDRAWAL | NUMBER | AMOUNT ($M) |
|---|---|---|
| 55 Years and Above | 446,087 | 5,544.6 |
| Leaving Singapore and West Malaysia | 5,460 | 645.8 |
| Medical Grounds | 1,290 | 91.1 |
| Death | 20,876 | 981.3 |
| Malaysian Citizen | 7,381 | 242.0 |
| **Total** | **481,094** | **7,504.8** |

# ANNEX H

## DISTRIBUTION OF CPF MEMBERS' BALANCES BY AGE GROUP AND SEX AS AT 31 DECEMBER 2018

| | Male | | Female | | Not Specified | | Total | |
|---|---|---|---|---|---|---|---|---|
| Age Groups (Years) | Number ('000) | Balances ($'000) | Number ('000) | Balances ($'000) | Number ('000) | Balances ($'000) | Number ('000) | Balances ($'000) |
| Up to 20 | 59 | 88,560 | 55 | 101,572 | - | - | 114 | 190,131 |
| >20 - 25 | 126 | 1,016,401 | 117 | 1,510,792 | - | - | 242 | 2,527,194 |
| >25 - 30 | 143 | 5,840,465 | 146 | 7,628,331 | - | - | 289 | 13,468,796 |
| >30 - 35 | 143 | 11,979,810 | 155 | 13,359,030 | - | - | 298 | 25,338,840 |
| >35 - 40 | 153 | 18,846,542 | 167 | 19,237,334 | 0.0 | 20 | 320 | 38,083,896 |
| >40 - 45 | 160 | 25,329,284 | 167 | 24,451,376 | 0.0 | 97 | 328 | 49,780,757 |
| >45 - 50 | 172 | 31,403,855 | 175 | 27,986,108 | 0.0 | 320 | 348 | 59,390,283 |
| >50 - 55 | 193 | 34,177,226 | 178 | 27,493,730 | 0.1 | 492 | 371 | 61,671,448 |
| >55 - 60 | 199 | 29,487,565 | 176 | 24,038,483 | 0.1 | 805 | 375 | 53,526,853 |
| Above 60 | 488 | 48,279,273 | 490 | 37,944,510 | 0.4 | 951 | 978 | 86,224,734 |
| Unspecified | 128 | 472,371 | 112 | 437,861 | 3.9 | 4,352 | 244 | 914,583 |
| **All Groups** | **1,964** | **206,921,352** | **1,940** | **184,189,127** | **5** | **7,038** | **3,908** | **391,117,517** |

Figures include self-employed persons.
Total may not add up due to rounding.

# ANNEX I

## DISTRIBUTION OF ACTIVE CPF MEMBERS BY REGROSSED BALANCES* AND AGE GROUP AS AT 31 DECEMBER 2018

| | AGE GROUP (YEARS) | | | | | | | | | | | TOTAL | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Balance Group ($) | Up to 20 | >20 - 25 | >25 - 30 | >30 - 35 | >35 - 40 | >40 - 45 | >45 - 50 | >50 - 55 | >55 - 60 | Above 60 | Not Specified | Active Members | Balance ($'000) |
| Below 1,000 | 23,030 | 3,400 | 2,830 | 1,760 | 920 | 500 | 260 | 80 | 60 | 280 | #0 | 33,130 | 12,816 |
| 1,000 to below 2,000 | 7,230 | 3,860 | 2,310 | 1,450 | 760 | 400 | 200 | 90 | 70 | 240 | #0 | 16,590 | 24,492 |
| 2,000 to below 3,000 | 4,040 | 5,440 | 1,940 | 1,110 | 600 | 360 | 170 | 80 | 70 | 250 | - | 14,050 | 34,822 |
| 3,000 to below 4,000 | 2,470 | 5,280 | 1,830 | 950 | 500 | 320 | 180 | 100 | 80 | 290 | #0 | 12,010 | 41,939 |
| 4,000 to below 5,000 | 1,600 | 5,140 | 1,780 | 880 | 510 | 290 | 190 | 90 | 90 | 350 | - | 10,910 | 49,026 |
| 5,000 to below 6,000 | 1,060 | 4,860 | 1,900 | 780 | 510 | 280 | 180 | 90 | 100 | 380 | #0 | 10,130 | 55,622 |
| 6,000 to below 7,000 | 830 | 4,720 | 1,830 | 720 | 440 | 270 | 170 | 100 | 110 | 440 | #0 | 9,630 | 62,490 |
| 7,000 to below 8,000 | 520 | 4,160 | 1,970 | 700 | 430 | 250 | 180 | 80 | 100 | 510 | #0 | 8,900 | 66,697 |
| 8,000 to below 9,000 | 470 | 3,850 | 2,000 | 770 | 440 | 280 | 190 | 110 | 100 | 520 | #0 | 8,720 | 74,102 |
| 9,000 to below 10,000 | 360 | 3,410 | 1,950 | 770 | 460 | 260 | 160 | 120 | 130 | 530 | - | 8,150 | 77,362 |
| 10,000 to below 20,000 | 1,440 | 24,620 | 19,170 | 6,530 | 3,980 | 2,570 | 2,020 | 1,310 | 1,540 | 8,190 | #0 | 71,360 | 1,060,946 |
| 20,000 to below 30,000 | 280 | 15,530 | 19,010 | 6,410 | 3,860 | 2,790 | 2,250 | 1,800 | 2,290 | 11,170 | - | 65,380 | 1,630,749 |
| 30,000 to below 40,000 | 80 | 9,570 | 19,440 | 6,410 | 3,950 | 2,880 | 2,550 | 2,220 | 2,870 | 12,690 | - | 62,650 | 2,191,534 |
| 40,000 to below 50,000 | 20 | 5,460 | 19,270 | 6,720 | 4,070 | 2,870 | 2,750 | 2,430 | 3,250 | 13,050 | - | 59,890 | 2,693,754 |
| 50,000 to below 60,000 | 10 | 3,250 | 18,500 | 7,250 | 4,060 | 2,980 | 2,850 | 2,760 | 3,400 | 14,560 | - | 59,620 | 3,278,218 |
| 60,000 to below 70,000 | 10 | 2,130 | 17,890 | 7,780 | 4,160 | 2,960 | 2,910 | 3,010 | 3,610 | 11,730 | - | 56,190 | 3,650,898 |
| 70,000 to below 80,000 | #0 | 1,280 | 16,370 | 8,410 | 4,340 | 3,180 | 3,020 | 3,130 | 3,640 | 10,900 | - | 54,270 | 4,068,638 |
| 80,000 to below 90,000 | #0 | 710 | 14,640 | 9,090 | 4,590 | 3,230 | 3,110 | 3,260 | 3,610 | 10,320 | - | 52,550 | 4,467,775 |
| 90,000 to below 100,000 | #0 | 340 | 12,830 | 9,680 | 4,820 | 3,400 | 3,250 | 3,320 | 3,610 | 10,140 | - | 51,370 | 4,877,852 |
| 100,000 to below 150,000 | #0 | 340 | 37,260 | 53,070 | 28,470 | 19,150 | 16,580 | 16,730 | 17,840 | 41,590 | - | 231,020 | 28,728,469 |
| 150,000 & above | #0 | 30 | 13,410 | 102,190 | 166,740 | 181,780 | 182,250 | 166,510 | 142,740 | 162,260 | - | 1,117,910 | 427,210,644 |
| **All Groups** | **43,460** | **107,350** | **228,110** | **233,420** | **238,590** | **230,980** | **225,410** | **207,400** | **189,300** | **310,370** | **10** | **2,014,410** | **484,358,843** |

Figures exclude all self-employed persons.
Total may not add up due to rounding.
* Regrossed Balances include amounts withdrawn under Investment, Education, Residential Properties, Non-Residential Properties and Public Housing Schemes as at end of period.
# Number of active CPF members is less than 5.

**Central Provident Fund Board**

cpf.gov.sg