

Superannuation Schemes of
UGC-funded Institutions

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Superannuation Schemes of UGC-funded Institutions

Background

1. At the request of the Legislative Council Panels on Education and Financial Affairs, a research on superannuation schemes of UGC-funded institutions and defined benefit schemes was undertaken. Findings of the research study are presented in this paper which is divided into two parts. Part I gives general information on retirement schemes and the registration and funding requirements of the Occupational Retirement Schemes Ordinance. Part II provides information on the superannuation schemes of UGC-funded institutions, with a simple analysis of their performance in the past decade and a comparison of the scheme features with those of selected companies in the private sector.

Part I: Retirement Schemes and the Occupational Retirement Schemes Ordinance

Types of Retirement Schemes

2. There are two broad types of retirement schemes - defined contribution schemes and defined benefit schemes. In defined contribution schemes (also called provident funds), contributions by employers and employees are fixed in advance and retirement benefits are determined on the basis of the accumulated contributions by employees and employers, plus any earned interest or investment returns. As benefits are uncertain in such schemes, the employees suffer when investment returns are not satisfactory.

3. In defined benefit schemes (which are also known as final salary schemes), benefits are determined by reference to the leaving employee's final monthly salary and the length of his qualifying service. The formula for calculating the benefits is as follows:

$$\text{Benefits} = \text{Multiplication factor} \times \text{Final monthly salary} \times \text{Number of years of qualifying service}$$

Contrary to defined contribution schemes, contributions required in defined benefit schemes are uncertain and depend mainly on investment returns and salary increases. The employer bears the investment risks and may have to increase his contributions in a defined benefit scheme.

Retirement Schemes in Hong Kong

4. There is at present no comprehensive information on the number of the two broad types of retirement schemes in Hong Kong. Statistics are however available on the number of such schemes applying for registration with the Registrar of Occupational Retirement Schemes. As at mid-April 1995, 4177 (95%) defined contribution schemes and 218 (5%) defined benefit schemes have applied for registration. The statistics below also show that defined benefit schemes are more commonly used by companies with large scheme membership.

<u>Membership size groupings</u>	<u>Total no. of schemes having such membership size</u>	<u>No. of defined benefit schemes having such membership size</u>
10 and below	1,846	19
11 - 20	1,071	26
21 - 30	418	12
31 - 40	213	7
41 - 50	128	7
51 - 60	103	7
61 - 70	73	6
71 - 80	63	10
81 - 90	41	4
91 - 100	34	2
101 and above	320	89
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	4,310	189
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(The above excludes 85 schemes applying for exemption.)

Source: Office of the Registrar of Occupational Retirement Schemes

Actuarial Valuation

5. The present legislation in Hong Kong requires that by 15 October 1995 all retirement schemes have to be pre-funded, i.e. assets of a scheme have to be accumulated in advance of the time when benefits are due to be paid. To ensure sufficient funds are set aside to pay the benefits promised to employees in defined benefit schemes, actuarial valuations have to be conducted regularly mainly for the following purposes:-

- (a) To review the position of the assets and liabilities of a scheme; and
- (b) To determine additional contributions required for a scheme that is underfunded.

6. The following are different ways of measuring the financial positions of the assets and liabilities in an actuarial valuation of a defined benefit scheme.

Solvency

This measures to what extent the amount of assets is sufficient to pay all the benefits due immediately, if the scheme is discontinued on the valuation date. A scheme is solvent if the market value of the scheme's assets is equal to or greater than the scheme's aggregate vested liabilities (or leaving service liabilities) as at the valuation date.

Adequacy

This measures to what extent assets of the scheme are sufficient to cover benefits which would become payable in the future (when members eventually leave employment) in respect of service completed up to the valuation date. A scheme is adequate if the market value of the scheme's assets is equal to or greater than the present value of the scheme's aggregate past service (accrued) liabilities.

7. Instead of ascertaining the adequacy of a scheme as outlined above, some actuaries may compare, in present value terms, the scheme's total assets (market value of existing assets and projected future contributions) with its total liabilities (total benefits payable in respect of past and future service). This ratio is referred to as the long-term funding ratio in this paper. If the assets are not sufficient to cover the liabilities, an increase in the contribution will be called upon. Appendix I summarises the different approaches to compare scheme assets and liabilities.

8. The calculation of a scheme's solvency position does not involve any actuarial assumptions. The vested liability can be accurately calculated based on the rules of the scheme and the market value of the scheme's assets refers to the net realisable value. As the latter is susceptible to fluctuations in the investment markets, the solvency indicator - solvency ratio could be volatile.

9. The calculations of adequacy and long-term funding ratio, on the other hand, involve projections into the future and require actuarial assumptions mainly on the following aspects:

- a) Salary increases
- b) Investment return
- c) Withdrawal
- d) Mortality/Disability
- e) Expenses

To ensure assumptions used are reasonably realistic, actuaries compare regularly the actual experience and the experience projected based on the assumptions. Actuarial assumptions will be revised if significant discrepancies are detected in such comparisons.

10. It must be pointed out that the three measures may not always move in the same direction. A scheme may be solvent but its long-term funding position could

be in deficit, suggesting that the contribution rate needs to be increased. On the other hand, a scheme can be insolvent and inadequate (because recent investment performance has been unfavourable) but expected to be viable in the long run.

Occupational Retirement Schemes Ordinance (ORSO) registration and funding requirements

11. The Occupational Retirement Schemes Ordinance (ORSO) became effective on 15 October 1993, requiring all local retirement schemes to be registered by 15 October, 1995. Thereafter, it will be an offence for an employer to operate an unregistered scheme and the employer may face a fine of HK\$500,000 and an imprisonment of two years.

12. Under ORSO, solvency of a defined benefit scheme is both a registration and an on-going requirement. There must be an undertaking by the employer to contribute to the scheme as recommended by the actuary, accompanied by either (a) a full actuarial certificate, issued triennially, stating that the scheme is solvent and expected to remain so over the next three years, or, where these conditions are not met, (b) a qualified certificate, in which the actuary expects the employer's funding, as recommended, would eliminate any shortfall within three years or (for schemes existing before 15 October 1993,) before 15 October 1998. Where a qualified certificate has been issued, annual actuarial valuations are necessary.

13. ORSO also requires that any shortfall in adequacy be funded, over a period as specified by the actuary. In general, this period should not exceed the average remaining working lifespan of employees. A more prudent approach is to restore the adequacy level to 100% within a shorter period.

14. Different countries have different funding requirements for their defined benefit schemes. In the U.K., for instance, the Pensions Bill currently going through the U.K. Parliament requires that the value of the assets of an occupational pension scheme to be not less than the amount of the liabilities of the scheme. As regards the time period allowed to restore to the 100% solvency level for underfunded schemes, the U.K. Government is of the view that an employer has to contribute to restore the value of a scheme's assets to not less than 90% solvency within a year and to restore 100% solvency within five years. In recognition of the volatility of the solvency ratios and the need to distinguish minor funding inadequacies from major funding problems, the Government is in favour of allowing assets to be valued using market values averaged over a number of months rather than on a single day.

Part II: Superannuation Schemes of UGC-funded Institutions

Scheme structure

15. All seven institutions funded by the University Grants Committee (UGC) - the University of Hong Kong (HKU), Chinese University of Hong Kong (CUHK), Hong Kong Polytechnic University (PolyU), Hong Kong Baptist University (HKBU), City University of Hong Kong (CityU), Hong Kong University of Science and Technology (HKUST) and Lingnan College (LC) - have operated defined benefit schemes, with the exceptions that since April this year CUHK and PolyU have amended theirs to a defined contribution scheme and variable defined benefit scheme respectively. HKU is also considering a change to a variable defined benefit scheme. By variable defined benefit scheme is meant one which would provide for negative adjustments when times are unfavourable as well as positive supplements when times are favourable.

16. Brief particulars of the schemes prior to the amendments are at Appendix II. In all those schemes, benefits are calculated by the formula: benefits = factor X final monthly salary x years of qualifying service. The factor, for long-serving employees, ranges from 2.53 at PolyU to 3.0 at CUHK.

17. During the past decade, increases in the factors took place at HKU in 1986, at CUHK in 1985 and 1988, and at PolyU in 1987. For these increases, the institutions were supported by actuarial recommendations, but did not consult the UGC in advance. They are required to refer proposed changes in the schemes to the UGC only if they have doubts whether the terms offered are comparable with, but no better than, those in the civil service. The Administration has generally adhered to the principle of institutional autonomy within the funding constraint described below.

18. In their schemes, employees contribute 5% of their salaries (or 5.75% at HKU) and employers 15%. There are provisions in the trust deeds or scheme regulations to the effect that:

- the stipulated benefits are guaranteed by the employer,
- any deficiency in the payment of benefits shall be made good in the first instance by the employer,
- any deficiency in meeting the scheme's liabilities upon dissolution of the scheme shall be made up by the employer, or
- (where a scheme has registered under ORSO,) the employer shall give a written undertaking to contribute to the scheme as recommended by the actuary.

Funding arrangements

19. The universities rely on government subventions as a main source to finance their superannuation schemes. In assessing its triennial recurrent grants to the universities, the Administration includes an amount equivalent to 15% of the average salaries, estimated to be required by the universities to meet their employers' reasonable obligations towards the employees' superannuation benefits. It has made clear that there is no question of the Administration underwriting the schemes or providing additional funding.

20. The universities may have private funds at their disposal, such as private donations, but it would be difficult to raise private donations specifically to inject

money into a superannuation scheme. It is not known what other sources of finance are available for the universities to finance their schemes in the event that they are underfunded.

21. In 1988, 1989 and 1990, the actuary for the HKU scheme, in concluding its valuations, did raise its concern that there was no mechanism to increase contributions in the event of deficits.

Comparison with companies in the private sector

22. Information relating to retirement schemes was collected from 14 selected companies, including major banks, public transport companies, utility companies and trading firms. Three of their schemes are defined contribution ones and the remaining eleven are defined benefit schemes. Particulars of the defined benefit schemes are provided by ten companies and they are summarised in Appendix III.

23. It will be noted that their benefit formulas are the same as for the universities, i.e. benefits = factor x final salary x years of qualifying service. The size of the factor for long-serving members ranges from 1.5 (but in this case the employee does not contribute) to 3.75 (where the employee contributes 6%). In half of the cases, employees do not have to contribute at all while employees contribute 5% of their salaries in all but one of the remaining schemes.

24. Employers contribute to the scheme at levels that meet the funding obligations under the defined benefit formula. The amount is not fixed but varies according to actuarial recommendations.

Performance of the schemes of HKU, CUHK and PolyU

25. The superannuation schemes of HKU, CUHK and PolyU have been in existence the longest and have had solvency, adequacy, and/or long-term funding problems in recent years. Summaries of their actuarial valuations from 1985 to 1995 are at Appendix IV.

26. In the case of HKU, solvency ratio decreased from 134% in 1988 to 99% - 100% in the past three years. The long-term funding ratio also fell, from 111% in 1988 to below 100% since 1991. The actuary warned about the unsatisfactory long term financial position in all valuation reports compiled since 1991 and called for special contributions in its 1991 and 1993 reports.

27. As regards CUHK, solvency rate increased from 94% in 1985 to 120% in 1987, then decreased markedly to below 90% since 1990. The long-term funding ratio follows the same trend and has decreased from 113% in 1987 to 89% in 1994. Suggestions to reduce benefits, increase contribution rate, or inject a lump sum special contribution were made in the last three actuarial valuation reports.

28. Solvency ratios of the scheme of the PolyU dropped from as high as 158% in 1987 to below 100% since 1991. The rates for recent years were around 92% -

93%. The long-term funding rate throughout the period under study was above 100%. However, a downward trend is noted and the rate decreased from 121% in 1986 - 87 to 102% in the last two years. The actuary has never made any adverse comments on the long term financial position of the scheme.

Performance of superannuation schemes of HKBU, CityU, HKUST and LC

29. All the schemes, except that for HKBU, are relatively young. Recent data showed the HKBU to be slightly below solvent. Otherwise, it would appear the institutions do not have solvency and long-term funding problems at the moment. All four institutions have applied for registration under ORSO; and HKBU, CityU and HKUST have already obtained Certificates from the Registrar of Occupational Retirement Schemes.

Hearings of the Public Accounts Committee

30. In October 1993, the Director of Audit expressed concerns in his Report No. 21 about the adequacy of government control over a number of provident fund/superannuation schemes operated by subvented organisations, including the universities.

31. On 22 November 1993 and 2 March 1994, hearings were conducted by the Public Accounts Committee of the Legislative Council on the Director of Audit's Report. The Committee sought views from officials on, *inter alia*, the Director of Audit's recommendation that further improvements to the multiplication factors in benefit formulas should be temporarily suspended, and whether the Administration would, as a matter of policy, discourage the establishment of further defined benefit schemes such as those for the universities, having regard to their funding constraint.

32. The ability of the universities to comply with the requirements of ORSO was also discussed in detail by the Committee. The UGC responded that all of the schemes were able to comply with ORSO, and that all the institutions, particularly those with schemes which had operated for a long time, were actively looking at what steps they needed to take in order to maintain their schemes in line with the new legislation. The UGC also informed the Committee that the institutions had accepted the position that there would be no question of any additional financial contribution from the Administration or from the UGC to enable them to comply with ORSO.

33. The conclusions and recommendations of the Committee are at Appendix V. Since the hearing, the Administration reported to the Legislative Council progress on the measures taken to improve the long-term financial position of the HKU's and CUHK's superannuation schemes on 12 October 1994 and 10 May 1995 respectively. The reports are given in Appendix VI.

Exemptions under ORSO

34. ORSO provides that an occupational retirement scheme does not have to be registered if

- the scheme is contained in or otherwise established by any Ordinance, such as the Pensions Ordinance and related Ordinances governing pensions in respect of the public service, and the Education Ordinance Grant Schools Provident Fund Rules and Subsidised Schools Provident Fund Rules, or
- the employer is a government of a country or territory outside Hong Kong or a non-profit agency or undertaking by that government.

In addition, employers may apply for an occupational retirement scheme to be exempted from ORSO where

- the scheme, being an offshore scheme, is registered or approved by an authority outside Hong Kong that performs functions analogous to the Registrar of Occupational Retirement Schemes, or
- not more than 10% or 50 of the scheme's members, whichever is less, are Hong Kong permanent identity card holders.

35. Any granting of exemption to the UGC-funded institutions has to be carefully considered as it would have implications for the occupational retirement schemes operated by other subvented organisations. Currently, besides the UGC-funded institutions, the Trade Development Council, Hong Kong Tourist Association and Vocational Training Council also rely on government subventions to operate defined benefit schemes for their staff.

36. A major objective of ORSO is to provide greater certainty that retirement scheme benefits promised to employees will be paid when they are due. It is therefore important that schemes should be prudently managed in all cases to ensure that sufficient funding is provided in advance. Exemption should not be considered unless there are good reasons.

Conclusion

37. The purpose of defined benefit schemes is to offer a known level of benefits to the employees. The employers are to bear all risks and have to contribute more to the schemes when they are underfunded. In the private sector, this is the arrangement for all companies covered in this research. In the case of UGC-funded institutions, because the source of funding for their defined benefit schemes is strictly limited, there is a lack of flexibility. Prudent management of the schemes and determination of the benefits at realistic level by the institutions are therefore extremely important.

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Appendices

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Major Considerations of Actuarial Valuations for Defined Benefit Schemes

Major actuarial concerns	Types of assets studied	Types of liabilities studied	Assumptions involved in actuarial valuation
Solvency	Market (net realisable) value of existing scheme assets	Aggregate vested liabilities (= leaving service benefits of all employees)	No actuarial or economic assumptions involved in the calculations
Adequacy	Market (net realisable) value of existing scheme assets	Present value of aggregate past service liabilities (= accrued benefits of all employees)	Principal actuarial assumptions on the following used: <ul style="list-style-type: none"> • Mortality /Disability • Withdrawal • Salary increases • Investment return • Expenses
Long-term funding position	Market (net realisable) value of existing scheme assets + Future contributions	Present value of past and future service liabilities	No assumptions used in determining market value of existing scheme assets; Actuarial assumptions similar to those used to study adequacy used for the other estimates

Appendix II (page 2 of 2)

Institution	HKU	CUHK*	PolyU*	CityU	HKBU	HKUST	LC
Normal retirement	Age 60	Age 60	Age 60	Age 65	Age 60	Age 65	Age 65
Calculation of Final Salary benefits	Factor x Final Salary x years of Scheme Service up to 33-1/3 yrs.	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service
Factor value upon normal retirement	2.53 to 2.86 depending on length of service	2.53 to 3.0 depending on length of service	2.53	2.6	0.7 to 2.6 depending on length of service	2.0 to 2.6 depending on length of service	0.7 to 2.65 depending on length of service
Previous factor values, where changed, during 1985-1995	2.3 to 2.6 (until 12.85)	2.53 to 2.86 (7.85 - 6.88); 2.30 to 2.60 (until 6.85)	2.28 (until 6.87)				

Note: All schemes provide benefits, which are calculated on similar basis as that for normal retirement, to scheme members who die in service or suffer permanent disability or leave service before his retirement age.

* CUHK and PolyU have amended their superannuation schemes recently. The above information refers to the schemes prior to the amendments.

**Defined benefit retirement schemes for administrative and professional staff
of selected Hong Kong companies**

Company	1	2	3	4	5
Type of scheme	Final Salary or defined contribution, whichever higher	Final Salary or defined contribution, whichever higher	Final Salary	Final Salary	Final Salary
Contribution: Members	5%	2.5% to 6%	Nil	Nil	Nil or 5%
Company	16% (for defined contribution option), or as needed	10% to 15% (for defined contribution option), or as needed	Full cost	Full cost	The balance
Employer to top up?	Yes	Yes	Yes	Yes	Yes
Normal retirement age	NA	60	Not specified	Not specified	60
Calculation of Final Salary Benefits	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service
Factor value upon normal retirement	High: 2.8 Low: 2 depending on member category	High: 3.75 Low: 2 depending on member category	0 to 1.5*	NA	High: 3.5 Low: 1.8 Depending on member category

* depending on length of service.

NA = not available

**Defined benefit retirement schemes for administrative and professional staff
of selected Hong Kong companies**

Company	6	7	8	9	10
Type of scheme	Final Salary	Final salary	Final Salary	Final Salary	Final Salary
Contribution: Members	Nil	5%	Nil or 5%	Nil	Nil
Company	Full cost	The balance	The balance	Full cost	Full cost
Employer to top up?	Yes	Yes	Yes	Yes	Yes
Normal retirement age	60	65	60	60	Not specified
Calculation of Final Salary benefits	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service	Factor x Final Salary x years of Scheme Service
Factor value upon normal retirement	High: 1.8 to 2.6* Low: 1.2 to 2.0* depending on member category	High: 0.8 to 3.6*, Low: 0.7 to 2.7* depending on member category	High: 3.3 Low: 1.7 depending on member category	1.8 to 2.5*	High: 0 to 3.0* Low: 0 to 2.3* Depending on member category

* depending on length of service

**Actuarial assessments of the staff superannuation scheme
of the University of Hong Kong, 1985-1995**

Valuation date	Actuary	Solvency ratio (%)	Adequacy ratio (%)	Long-term funding ratio (%)	Actuarial conclusions
31.12.85	Claridge	NA	NA	NA	Solvent. Long-term funding adequate.
Increase in multiplication factor for calculation of benefits					
31.12.86	Claridge	NA	NA	NA	Solvent. Long-term funding adequate.
31.12.87	Claridge	NA	NA	NA	Solvent. Long-term funding adequate.
30.6.88	Wyatt	134	NA	111	Solvent. Long-term financial position healthy. Caution: there is no mechanism to increase contributions in the event of deficits.
30.6.89	Wyatt	117	NA	104	Solvent. Long-term financial position healthy. Caution: there is no mechanism to increase contributions in the event of deficits.
30.6.90	Wyatt	111	NA	101	Solvent. Long-term position satisfactory. Warning: there is no mechanism to increase contributions in the event of deficits.
30.6.91	Wyatt	97	NA	96	Not solvent, special contribution recommended. Long-term position not satisfactory.
30.6.92	Wyatt	102	NA	98	Solvent. Long-term position not satisfactory.
30.6.93	Wyatt	99	NA	96	Not solvent, special contribution recommended. Long-term position not satisfactory.
30.6.94	Wyatt	100	NA	97	Solvent. Long-term position not satisfactory.
31.3.95		99	NA	NA	NA

Source: University Grants Committee, for 1995; actuarial valuation reports, all other years.

NA = not available.

An explanation of the ratios is given in the Note that follows.

**Actuarial assessments of the staff superannuation scheme
of the Chinese University of Hong Kong, 1985-1995**

Valuation date	Actuary	Solvency ratio (%)	Adequacy ratio (%)	Long-term funding ratio (%)	Actuarial conclusions
30.6.85	Claridge	94	NA	101	Not solvent. A 1.5% increase in scale of benefits each year, to a total of 10%, could be supported.
Increase in multiplication factor for calculation of benefits					
30.6.86	Claridge	110	NA	102	Solvent. A 10% increase in benefits could be supported.
30.6.87	Claridge	120	NA	113	Substantial surplus. To consider increases in benefit level.
30.6.88	Claridge	100	NA	104	Substantial surplus. Margin available for increasing benefits.
Increase in multiplication factor for calculation of benefits					
30.6.89	Claridge	100	NA	94	Solvent. Valuation shows deficit but no action needed.
30.6.90	Claridge	96	NA	94	Not solvent. No remedial action needed at this time.
30.6.91	Claridge	85	NA	90	Not solvent. No remedial action needed at this time..
30.6.92	Claridge	88	NA	91	Not solvent. Suggest consider reduction of benefits, increasing the contribution rate, or lump sum special contribution.
30.6.93	Wyatt	87	83	88	Not solvent. Valuation calls for an increase in the University's contribution rate, or a special contribution to meet ORSO requirements.
30.6.94	Wyatt	88	84	89	Not solvent. Valuation calls for an increase in the University's contribution rate, or a special contribution to meet ORSO requirements.
31.3.95		85	NA	NA	NA

Source: University Grants Committee, for 1995; actuarial valuation reports, all other years.

NA = not available.

An explanation of the ratios is given in the Note that follows.

**Actuarial assessments of the staff superannuation scheme
of the Hong Kong Polytechnic University, 1985-1995**

Valuation date	Actuary	Solvency ratio (%)	Adequacy ratio (%)	Long-term funding ratio (%)	Actuarial conclusions
30.6.85	Wyatt	119	108	113	Demonstrably solvent. Higher benefits can be justified.
28.2.86	Wyatt	134	127	121	Demonstrably solvent. Higher benefits can be justified.
30.6.87	Wyatt	158	157	121	Financial position very healthy. Opportunity for benefit improvements.
Increase in multiplication factor for calculation of benefits					
30.6.88	Wyatt	125	128	114	Solvent. Long-term position adequate, with some scope for further benefit improvements.
28.2.89	Wyatt	124	126	113	Solvent. Long-term position healthy.
30.6.90	Wyatt	107	99	107	Solvent. Long-term position adequate.
30.6.91	Wyatt	93	87	102	Not solvent. Long-term position adequate.
30.6.92	Wyatt	94	89	103	Not solvent. Long-term position adequate.
30.6.93	Wyatt	92	87	102	Not solvent. Long-term position adequate.
30.6.94	Wyatt	93	87	102	Not solvent. Long-term position adequate.
31.3.95		92	NA	NA	NA

Source: University Grants Committee, for 1995; actuarial valuation reports, all other years.

NA = not available.

An explanation of the ratios is given in the Note that follows.

**Actuarial assessments of the staff superannuation scheme
of the Hong Kong Baptist University**

Valuation date	Actuary	Solvency ratio (%)	Adequacy ratio (%)	Long-term funding ratio (%)	Actuarial conclusions
31.1.89	Wyatt	126	111	102	Solvent. Long-term financial position satisfactory.
31.12.90	Towers Perrin	90	86	NA	Not solvent, lump sum injection should be considered. Long-term financial position reasonably sound.
30.6.91	Towers Perrin	97	92	NA	Not solvent. Long-term funding adequate.
30.6.92	Towers Perrin	104	93	NA	Solvent. Long-term funding adequate.
30.6.93	Towers Perrin	107	97	NA	Solvent. Long-term funding satisfactory.
30.6.94	Towers Perrin	102	102	NA	Solvent. Long-term funding satisfactory.
31.3.95		98	NA	NA	NA

Source: University Grants Committee, for 1995; the relevant actuarial valuation reports, all other years.

An explanation of the ratios is given in the appended Note.

**Actuarial assessments of the staff superannuation scheme
of the Lingnan College**

Valuation date	Actuary	Solvency ratio (%)	Adequacy ratio (%)	Long-term funding ratio (%)	Actuarial conclusions
30.6.94	Wyatt	145	98	102	Solvent, and likely so in the next 3 years.
31.3.95		169	NA	NA	NA

**Actuarial assessments of the staff superannuation scheme
of the City University of Hong Kong**

Valuation date	Actuary	Solvency ratio (%)	Adequacy ratio (%)	Long-term funding ratio (%)	Actuarial conclusions
30.4.88	Wyatt	248	120	103	Solvent. Financial position sound.
30.4.91	Wyatt	123	102	102	Solvent. Financial position sound.
30.4.94	Towers Perrin	119	103	NA	Solvent. Current contribution rates adequate.

**Actuarial assessments of the staff superannuation scheme
of the Hong Kong University of Science & Technology**

Actuary	Valuation date	Solvency ratio (%)	Adequacy ratio (%)	Long-term funding ratio (%)	Actuarial conclusions
Towers Perrin	30.6.93	403	116	NA	Solvent. Long-term funding more than sufficient.
Towers Perrin	30.6.94	250	108	NA	Solvent. Long-term funding more than sufficient.

Source: University Grants Committee, for 1995; the relevant actuarial valuation reports, all other years.

An explanation of the ratios is given in the appended Note.

Note on actuarial ratios

Solvency ratio

= (market value of scheme's assets)

÷ (value of benefits payable if all members were to leave employment on
the valuation date)

x 100%

Adequacy ratio, or past service ratio

= (market value of scheme's assets)

÷ (the discounted present value of members' benefits in respect of service
to date on eventual exit)

x 100%

Long-term funding ratio

= { (market value of assets) + (present value of future contributions) }

÷ { present value of members' expected benefits in respect of past *and*
future service }

x 100%

The *adequacy ratios* and *long-term funding ratios* shown are those based on the actuarial assumption that the expected rate of investment return will exceed the rate of salary increase by 1% over the long term.

For comparison purpose, the actuary may make alternate calculations based on a differential of 2%, and sometimes 1.5%. Assuming a smaller differential yields a more conservative valuation. For the purpose of studying the trend over time, what matters is that the same assumption is used throughout.

Extracted from "Report of the Public Accounts Committee" (May 1994)

Provident fund and superannuation schemes
operated by subvented organizations

3.26 Conclusions and Recommendations. The Committee:

- wish to express their concern that staff working in different subvented organizations are not receiving the same scale of contribution to retirement benefits in view of the great variety of provident fund and superannuation schemes being operated by these organizations;
- note that the 'junior, non-academic, staff' of the UPGC-funded institutions do not enjoy the same scale of retirement benefits available to academic staff and question the appropriateness of this difference in treatment for staff working in the same institutions;
- note the explanations given by the Administration on the concept of institutional autonomy and wish to express their view that this concept should be applied flexibly to the extent that the Government should maintain a more active monitoring role over activities with financial implications;
- share the concern expressed by the Director of Audit that being the principal financier of subvented organizations, the Government would be under pressure to bail out insolvent retirement fund/superannuation schemes operated by these organizations, and note and support the Administration's assertion that it is the responsibility of the institutions concerned to make sure that their retirement schemes are well managed as there is no question of the Government bailing out the retirement fund and superannuation schemes should they run into financial difficulty;

Extracted from "Report of the Public Accounts Committee" (May 1994)

Provident fund and superannuation schemes
operated by subvented organizations

- consider that the UPGC should take a more active role in monitoring the financial position of the superannuation schemes operated by the UPGC-funded institutions;
- urge the UPGC to seriously consider appointing its own advising actuary in order to fulfill its monitoring role, and this should include reviewing the actuarial assumptions of the different schemes;
- note and support the Administration's policy that the UPGC-funded institutions are not allowed to make use of any resources other than the 15% notional provision within the recurrent grant, which is the public sector contribution to the schemes, for the purpose of topping up such retirement schemes;
- are pleased to note the assurance given by the Secretary-General, UPGC that the UPGC-funded institutions have absolutely no intention of proposing any improvement to the multiplication factors in the foreseeable future;
- note that an inter-institutional task force has been established to re-examine the possibility of standardization of superannuation benefits;
- wish to be informed of the outcome of the review undertaken by the inter-institutional task force;
- wish to express their concern that the long-term financial position of the superannuation schemes of the HKU and the CUHK have recently been regarded by their actuarial advisers as not totally satisfactory;

Extracted from "Report of the Public Accounts Committee" (May 1994)

**Provident fund and superannuation schemes
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- wish to express the view that whenever the financial position of a superannuation scheme is regarded by its actuary as less-than-satisfactory, the institution concerned should critically examine whether the current levels of benefits under the scheme are realistic, and seriously consider adjusting the level of benefits if the long-term financial viability of the scheme is in doubt;
- note that the UPGC had requested the two institutions concerned to consider remedial measures and to report in June 1994 on the specific measures that they propose to take in order to remedy the long-term and short-term financial positions of their schemes; and
- wish to be informed of the action taken by the UPGC and the two institutions regarding the financial position of the schemes concerned.

Extracted from Sessional Paper No. 4 of 94/95

Long-term financial position of HKU's and CUHK's superannuation schemes

8. The Administration notes the Committee's concern and the UPGC had already asked the two institutions concerned to submit reports on specific steps to be taken to improve the long-term financial position of their schemes by mid-July 1994 (not in June 1994 as stated on page 35 of the PAC Report No. 21A). The Administration has received the institutions' returns and submitted them to the UPGC for consideration in September 1994. The Administration will inform the Committee of the steps taken by the institutions and any follow-up action, if necessary, to be taken in due course.

附件六

摘自 立法局會期省覽文件 4 - 94/95

港大及中大的退休金休劃的長遠財政狀況

8. 當局已知悉委員會所關注的問題，而資委會已要求該兩所院校在一九九四年七月中之前（而非政府帳目委員會第二十一A號報告書第19頁所說的一九九四年六月）提交報告，說明為改善所辦計劃的長遠財政狀況而會採取的具體措施。當局已收到兩院校的報告，並於九四年九月將報告提交資委會審議。當局會告知委員會兩院校所採取的措施，以及稍後在需要時擬進行的跟進工作。

Extracted from Sessional Paper No. 83 of 94/95

Long term financial position of HKU's and CUHK's Superannuation Schemes

41. HKU has established a Working Party on the Amendment of the Staff Terminal Benefits Scheme to address the issue. The University Council has supported the Working Party's proposal to change the scheme to a "variable defined benefit" scheme which would provide for negative adjustments when times are unfavourable as well as positive supplements when times are favourable in order to enable the scheme to be registered under the provisions of the Occupational Retirement Schemes Ordinance (ORSO). The University will seek the consent of the members of the Scheme to the Working Party's proposal or whatever other actuarially-sound proposals may be made by the University's staff association on the understanding that the existing scheme must otherwise be terminated and replaced by other arrangements in order to meet the deadline for registration of the scheme under ORSO.

42. CUHK on the other hand is actively considering ways in which the University might change the basis of its scheme from defined benefit to defined contribution including setting up a new scheme whereby their staff members ultimate benefits will depend on investment performance rather than the individual's termination salary. The University is currently engaged in discussions with its staff regarding the proposal.

43. The UGC will continue to monitor closely the financial position of these Universities superannuation schemes.

Reference

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