CHAPTER 5

METHODOLOGY FOR THE VALUATION OF FRINGE BENEFITS

5.1 INTRODUCTION

5.1.1 Prior to receiving, from the PLSAC, suggested amendments to the methodology for the valuation of fringe benefits, to which we have agreed (as described in Chapter 7 of this Report), Hay were instructed to use the methodology endorsed by the Acting Governor, which is summarized in the following paragraphs.

5.2 BASIC PRINCIPLES AND ASSUMPTIONS

- 5.2.1 The following major principles and assumptions were adopted in the valuation of fringe benefits:
 - (a) Total packages for jobs of comparable Hay points were assessed on the basis of the notional value of each individual fringe benefit;
 - (b) The valuation of individual fringe benefits for pay level comparisons had regard only to local terms of service. Data on expatriate fringe benefits were reported separately;
 - (c) The valuation of individual fringe benefits had primary regard to male staff;
 - (d) For the valuation of benefits which related to an employee's family circumstances, the assumption was that a family had a single breadwinner and consisted of a married couple and two children;
 - (e) The value of a benefit was assessed on the basis of the cost to an employee of replacing a benefit provided by his employer;
 - (f) All fringe benefits were to be included in total packages, with the exception of those:
 - (i) which were provided at the employer's discretion;
 - (ii) which were subject to restrictive regulations imposed by the employer to the extent that most employees could not make use of the benefit;
 - (iii) the utilization rates of which were very low, such as 10% or less; and/or

- (iv) the value of which was impossible to ascertain or the data for which were difficult to capture;
- (g) Once a benefit had been included in total packages, it was valued on the assumption that maximum utilization would be made of it, and the actual rate of utilization was disregarded, with the exception of housing benefits (see paragraph 5.4.1(c));
- (h) Benefits provided for operational reasons were excluded from total packages;
- (i) The impact of taxation on the value of benefits was taken into account in total packages; and
- (j) The value of benefits to be included in total packages was expressed in absolute terms as well as in percentages of salary or pay.

5.3 STANDARD POPULATION MODEL

5.3.1 For fringe benefits, in particular those such as retirement benefits and death and disability benefits in which demographic factors of age, length of service etc. had a bearing on the calculations, a fair comparison could be made by using the Standard Population Model. This Model, constituting a procedure by which the composition of a selected group in the public sector was broken down by age, length of service etc., was used as a fixed reference point for the calculation of the value of benefit entitlements in the private sector. As the characteristics of the selected group were held constant, the resulting values of employers' benefit plans reflected only the differing features of these plans, and not the demographic characteristics of the recipients.

5.4 VALUATION OF INDIVIDUAL BENEFITS

- 5.4.1 The following method of valuation was used for individual fringe benefits:
 - (a) For retirement benefits in the form of pension benefits and lump sum payments calculated on final salaries in the civil service or similar calculations on provident fund contributions in the private sector, the following formula was used:

The sum of (Amount of Benefit x Discount Factor)
Spreading Factor

Annual allowances in the civil service were calculated as:

75% x value of pension;

(b) Death and disability benefits were valued according to the following formula:

Benefit payable on Insurance premium death or disability x per dollar of at valuation date benefit payable

- (c) Housing benefits were valued as follows:
 - (i) Upper/upper band

Housing benefits in this pay band were valued on the basis of (a) maximum notional value and maximum utilization and (b) maximum notional value and the pattern of utilization — i.e. the number of officers actually taking up each type of housing benefit, as requested by the Acting Governor and as a separate exercise.

For the upper/upper band, using the former approach, only Government-owned non-departmental quarters were taken into account and valued according to weighted average market rental value. However, the average value of the benefit for the pay band was calculated on the basis of the distribution pattern of officers occupying the various grades of quarters (see paragraph 8.4.3 below).

Using the latter approach, the pattern of utilization of all the entitlements - i.e. non-departmental quarters (NDQ), Home Purchase Allowances (HPA) and Private Tenancy Allowances (PTA) - was taken into account, except for housing loans, which were disregarded as de minimis. HPA and PTA were valued using the maximum of allowances, less employee's contributions, if any;

(ii) Upper band

Similarly for the upper band, the two approaches described above were followed in valuing housing benefits. HPA, the benefit with the highest value to which the upper band was entitled, was used in the maximum notional value/maximum utilization approach. The methods of valuation for HPA and PTA, as

described above, were used in the second approach, which took into account the pattern of utilization;

(iii) Middle and lower bands of the Master Pay Scale and Model Scale 1

Housing benefits were excluded from the calculation of total packages for the middle and lower bands of the Master Pay Scale due to low utilization;

Model Scale 1 was not entitled to housing benefits;

(iv) Downpayment loans/subsidized loans for housing in the private sector were valued in accordance with the following formula -

$$L \times (\frac{1}{ANI} - \frac{1}{AN2})$$

where L = maximum loan amount

AN1 = annuity * at market rate of interest for the term of the loan

AN2 = corresponding annuity at interest rate paid by employee;

- (d) Medical benefits and dental benefits were valued in both sectors by obtaining the current insurance premium rates to cover the existing medical plans provided;
- (e) Leave passages in the private sector were valued using the pro rata annual value of the entitlement, assessed on the basis of the maximum amount of cash allowance or the current tariff rates for travel tickets, having regard to the standard family size;
- (f) Vacation leave and casual leave in the civil service and comparable leave in the private sector were valued by adjusting total packages in the private sector. In doing so, the differences in hours of work and leave between the two sectors were taken into account in accordance with the following formula -

Annuity is defined as the present value of a series of loan payments:

Adjusted private company total packages =

(Civil Service Notional Hours of Work + Civil Service Essential Overtime Hours, if any)

Total Packages Hours of Work + Private Company's Essential Overtime Hours, if any);

- (g) Job-related allowances were valued in both sectors as pay supplements in cases where the agreed duties of the job under comparison entitled staff to claim them;
- (h) Private sector bonuses and profit-sharing payments which were part of the normal remuneration for the job were included. However, special payments were excluded; and
- (i) All miscellaneous benefits were included in the valuation. In particular, the following methods of valuation were used for certain miscellaneous benefits:
 - (i) Personal loans provided at interest rates below market rates were valued in accordance with the following formula -

 $L \times \left(\frac{1}{ANI} - \frac{1}{AN2}\right)$

where L = maximum loan amount

AN1 = annuity at market rate of interest for the term of the loan

AN2 = corresponding annuity at interest rate paid by employee;

- (ii) Meal allowances were regarded as pay supplements;
- (iii) Where public utility charges were borne by employers, the cost to the employers of paying the public utility bills, less any employees' contributions, was used; and
 - (iv) Entrance or membership fees for social clubs, transport subsidies provided in the form of cash payments, provision of cars for personal use, employer-subsidized recreational travel provided as a right and domestic servants paid for by employers etc. were calculated on the basis of their value to the employees receiving them.