

study, 51 different occupational groups at the two-digit level within the Australian Standard Classification of Occupations were identified for data concerning the 'F' co-efficient (p 6).

Industry differences would appear to have a small, but not insignificant, effect on the estimation of the differential.

MANAGERIAL EMPLOYEES

Professor Wooden states that that it is appropriate to exclude managerial employees for the purposes of assessing the wage differential, because the earnings of managers are typically outside the purview of industrial awards, and because the difference might not result from unequal earnings, but from unequal access to promotional prospects.

Professor Gregory analyses the regression analysis which considers the exclusion of managerial employees. He notes that, if managerial employees are included, the gender concentration effect is -0.18 per cent in the male equation. When managerial employees are excluded, it falls to 0.6 per cent. He concludes that there is therefore something special about the gender of an occupation which affects the earnings of male managerial employees (Ex 100 para 15). Whilst he accepts other possibilities, as noted below, as causing that effect, his conclusion would, in my view, indicate the desirability of considering managerial employees in any assessment of the male/female differentials. The observed effect on male employees might be a reflection of

the general “mark down” of women’s wages in occupations with a disproportionate share of employed women. Professor Gregory indicates this result may be taken as a priori evidence of the effects of occupational segregation (Ex 100 para 15). Professor Wooden indicated that he was not sure that he was able to agree with this proposition and that perhaps there was a “glass ceiling” type effect in that women perhaps do not go as far in management.

I am not convinced that the exclusion of managerial employees is necessarily appropriate. Managers were not defined in Professor Wooden’s analysis, although he did give an illustrative salary of \$1129.60 (for May 1996) (Ex 101 p 10). It does not follow that such employees will escape the attention of the Commission in the ordinary award making process, particularly in the public sector. It may also be that such exclusion would impinge upon the relatively broad aggregate analysis I am considering in this section of my report.

It can be seen from the foregoing analysis that there is a reasonable basis for concluding that, in reviewing aggregate data, the occupational concentration effect may be greater than the 2.1 percentage points difference resulting from Professor Wooden’s final decomposition analysis, and within the range generally proposed by the economists called to give evidence in the Inquiry. Most significantly, a larger differential will be expected where female intensity is greatest, the very area where undervaluation might represent a more significant problem.

ECONOMIC ANALYSIS - ALTERNATIVE APPROACH - ELIMINATING OR REDUCING AGGREGATION

Professor Gregory raised an additional significant dimension to the analysis of wage differentials in the third question that he posited on page 5 of Exhibit 100. It will be recalled that Professor Gregory's first two questions raised questions as to aggregate or average affects. The third question is quite different and is presented by Professor Gregory as follows:

There is a third question which is not usually addressed. In any particular occupation is there gender affect arising from the disproportionate representation of women workers.

Most of the emphasis in a Pay Equity Inquiry should be on the third question, the pay rates in different occupations and not the first two questions, the average effect of gender and the effect the dispersion of gender composition across occupations (Professor Gregory's emphasis) (Ex 100 paras 17 and 18).

Professor Gregory illustrates this third proposition by a hypothetical example which, in my view, is an important illustration. I have in mind some submissions which suggested that salary movements for persons in occupations with a high female concentration would be ineffective in reducing any male-female wage discrimination.

The example in Exhibit 100 given is as follows:

Suppose, in one occupation, which was 90% female, we knew that pay was marked down 30% because the occupation was female. Assume also that we knew that there was no other occupation in which there was a gender effect. Assume further that 5% of employed women are employed in this occupation. In

terms of fitting a linear relationship across all occupations there may appear to be a small or no effect of gender.

In terms of question (ii) the effect of pay equity on the overall pay ratio would also be very small. After 5% of men are "reallocated" to this occupation the change in the overall pay ratio of women relative to men may change by about one to two percent (approximately 30 percent multiplied by 5 percent).

In terms of question (iii) the achievement of pay equity would increase the pay of women in this occupation by 30 percent. A very large change for the women affected.

Focussing on the 30 percent (question (iii)) gives an entirely different impression to the importance of the issues to be considered by Inquiry than focussing on the answer (i) or focussing on the one or two percent, the answer to question (ii)".

In my view these observations are significant. The 'third question' identified by Professor Gregory is both a relevant and important part of the assessment of 'pay equity' or 'equality of remuneration' for men and women. Professor Wooden was content with the formulation of the appropriate question by Professor Gregory including the third question. Likewise Mr Cox concurred with that approach (Ex 277 para 26). In part, my analysis of the third question will be reflected in my assessment of the selected industries and occupations.

CONTENTIONS THAT OCCUPATIONAL SEGREGATION AND MALE-FEMALE WAGE DIFFERENTIALS MAY BE IGNORED OR DISCOUNTED

There was some debate about the significance which should be attached to, and conclusions that may be drawn from, the economic research and analysis. There were a number of submissions mounted in the Inquiry to the effect that the Commission should not make any findings that there existed an unexplained wage gap or wage discrimination in an economic sense which

required attention or correction. These arguments were generally that:

1. The effect of segregation was overstated and did not really require attention - on proper analysis there was not truly an unexplained differential.
2. There were countervailing considerations indicating why the Commission would not intervene to propose a salary adjustment if a wage differential was found to exist or represent a problem.

I shall deal with such contentions below.

'INTRA' AND 'INTER' OCCUPATIONAL GENDER WAGE DIFFERENCES

The Employers' Federation/Chamber submitted that Professor Gregory was critical of Professor Wooden's level of aggregation, but that the analysis of Kidd and Shannon (1996) concluded that the level of aggregation makes no difference because differences in pay lie within occupations (Ex 446 p 22). However, this reply does not really address Professor Gregory's discussion of linear and non-linear relationships. As to the question of inter versus intra occupational factors, I will deal with those matters shortly. Most importantly however, Professor Wooden agreed that the third question raised by Professor Gregory was appropriate.

It is argued for the Employers' Federation/Chamber that the research by Rimmer (1991), Kidd and Meng (1997) and Kidd and Shannon

(1996) indicate that occupational segregation had little effect on the overall gender wage differential, that research being said to demonstrate that changing the occupational mix of women to parallel that of men would have no impact on the gender pay differential (Ex 446 p 16).

Sheila Rimmer (1991) finds that although women have a different occupational mix than men, and their earnings fall as female intensity increases, allocating women among occupations in the same way as men are allocated and paying them the wage that women receive in those occupations would not increase women's earnings (my emphasis). She finds that the average pay disadvantage paid to women occurs within occupations. Ms Rimmer found that "an across the board effect to desegregate occupational employment would result in the decline in the average absolute and relative earnings of female workers", a result she describes as "surprising". (Rimmer 1991 p 205 (Ex 361) and Gregory Ex 99 para 25).

However, there are substantial reasons why the conclusions in the Rimmer study should be treated with care and why those conclusions are not ultimately significant for this report. Professor Gregory identifies the difficulties as follows:

- (i) The Rimmer study just looks at the occupation and distribution of men and women and the pay ratio of men and women and does an experiment of keeping the pay ratio fixed and reallocating women and men so as to get the same occupational distribution. She finds that upon this analysis there is no disadvantage to women and Professor Gregory finds this a very, very surprising result.
- (ii) He considers that this result is obtained because there is a

high level of occupational aggregation in the Rimmer study and she does not take into account all human capital variables.

- (iii) He also notes that the Miller 1994 reaches a different conclusion with different Australian data. More significantly Professor Gregory indicates that the Rimmer study is at odds with the Wooden study. Professor Gregory prefers Professor Wooden's analysis, saying that "it makes much more sense to me".

Professor Gregory is of the view that the particular mix of intra (or inter) factors depends on the level of aggregation that is being dealt with. Thus the fewer the occupational areas examined as part of the methodology study, or a higher level of aggregation, the more important 'intra' occupational factors become. This would explain the relative lack of applicability of Rimmer's work in the present context.

Professor Green considers that intra occupational gender wage differences are important. He notes that gender based occupational segregation is present across all age groups in Australia. Over half of women workers are located in 8 of the 52 occupational sub groups (Ex 271 para 27). Women dominate the lower end of the earning spectrum for most occupations. They are not only segregated into a limited occupational range, but they remain segregated within a limited range of low grade positions, with less training possibilities and little career path progression (Snell 1986). Thus, greater intra occupational earnings quality would definitely narrow the gender gap (Rimmer 1994) (Ex 271 para 28).

However, Professor Green contended that inter occupational

comparisons do have a significant impact. Wage adjustments are a separate issue from occupational distribution. Professor Green contends that the “single most effective way to assist women in the short term is to raise their pay, since redistributing them into different occupations at the low end of the pay scale will have little or no impact on relative earnings” (Rimmer 1994) (Ex 271 para 29).

He further states that:

- (i) increasing wage rates for jobs dominated by women employees will reduce the gender gap;
- (ii) safety net pay adjustments assist women workers since they are located at the bottom end of the pay scale (Ex 271 para 29).

Professor Green also concluded that equal pay adjustments based upon inter-occupational differences may, in contrast to the 1972 Equal Pay Case, have the result of reducing, in a modest way, occupational segregation.

It appears that Professor Emerita Helen Hughes also accepts that inter occupational differences are significant, in that she contends that the gravest current “discrimination” against women lies in barriers to entry into skilled manual trades for women from low socio-economic areas. On one view, this issue was addressed as one concerning access. For example, Professor Emerita Hughes argues that gender distribution among incomes occurs according to education, training and ability (Ex 329 p 17). However, she also focussed upon the extent of occupational segregation, pointing out that only

eleven percent of tradespersons are women and, if tradespersons in trades such as hairdressing and dressmaking are excluded, the ratio drops to one percent (Ex 329 p 9).

Whilst Professor Emerita Hughes argued strenuously against comparative worth models, which she defined as an attempt to evaluate jobs by their intrinsic worth, as distinct from any economic attributes, she nonetheless contended that the earnings differentials between men and women could be considered by reference to the relative skills and responsibilities between different trades groups, saying, for instance, that women continue to opt for hairdressing, sewing and cooking which have relatively low skills and responsibilities (Ex 329 p 9). Thus even though Professor Emerita Hughes argues that the cause of unequal earnings does not lie in wage and discretionary payment setting, put in the absence of women from highly skilled trades, in substance she imports into this analysis a relative valuation of the earnings of men and women in respective trades, so as to demonstrate the source of the difference. Put slightly differently, in order to make good her proposition Professor Emerita Hughes herself evaluates the relative worth of men's and women's trades defining one as "highly skilled" (that is men's trades) and the other as "less skilled" (that is female trades).

This is made clear in her evidence, where Professor Emerita Hughes not only implicitly accepts the need for an inter occupational valuation process, but identifies at least one means by which that process would be undertaken, namely, through the assessment of relative training. I refer to

Professor Emerita Hughes evidence at page 2534 of the transcript of the proceedings which is set out below:

Q: I am sorry I have not made that question clear. Leaving aside the earlier question I asked you on relative wages and just in terms of the notion of groups such as hairdressers, sewing and cooking, having as you describe it relevant low skills and responsibilities, the question I ask is what are the skills and responsibilities compared to what other group?

A: Well for example compared to groups in trades persons. There are, if you look at the table below, there are a million people, trades persons. Now there is over a million people who are trades persons and they are predominantly male. By and large the skills, the training and the skills of engineers and professionals, metal workers, plumbers, electricians, all sorts of skilled tradesmen have much higher skills than hairdressing, sewing and cooking and they get higher pay.

The question I am asking there is I suppose this. If I was seriously interested in improving the conditions of women in Australia, and reducing the earnings gap (and I am and have been all my life) then I would ask the question, "Why don't we have any women motor mechanics? Why don't we have any women plumbers? Why don't we have other skilled tradesmen, for example, electronics tradesmen where women are said to be specially suited with other skills?" So I would say why don't we have women move into those high skilled, high earnings professions, trades?

Q: The comparative or relative assessment that you there make is to compare trades persons and I take it that comparison is made to both the trades persons groups that is in the table you presented, trades person and miscellaneous trades mentioned?

A: Yes, I mean hairdressers, tailors and cooks. Chefs are also trades persons but by and large they are not always, by and large, not as skilled. They don't require the training for example of a motor mechanic or a metal trades worker or an electronics worker. Their training is much more limited. Hairdressers have very limited training compared to those trades and that is what I am talking about.

Q: In terms of assessing the relative position of one as opposed to the other as we are doing here, apart from training are there any other criteria or considerations that you have applied to determine the position of one as compared to the other?

A: The objective criteria set training provides the basic difference in base pay and then as careers develop you get different career progressions and there is certainly more career progression being a metal trades worker right up until high supervision provisions with the possibility of moving into technical skills by doing additional training, whereas hairdressing has not got the same range of skills that the metal worker has.

I note that, to me, Professor Emerita Hughes' basis for coming to the judgment as to the relative value of male and female trades indicates the need to make careful assessments of the value of the work of male and female employees upon a proper methodological basis. For example, I refer to the following extracts from the transcript of the cross examination of Professor Emerita Hughes:

Q: You have not in recent times, looked at the trade issue and compared male and female trades?

A: Well I do monitor it constantly because I am constantly appalled at the low ratio of apprentices in that ninety percent of the trades were men where men are taken to be the major participant and I see that in those trades the proportion of women is somewhat low, 1.6 percent of apprentices and you know, I am a user of hairdressing. I am user of motor mechanics. I observe the skills and I do not see that there is any reason for women not to become motor mechanics.

Q: Leaving aside the issue which is the market segregation or occupational segregation, I am really only interested at this point of time in the relative value ascribed to trades and you indicate you have observed the skills attached in both motor mechanics and hairdressers, is that your evidence?

A: I am not a professional in this field, but I find great difficulty in observing differences which are based on competence judgments. I am not competent in what? At what level? These are all subjective judgments. So I am having increasing difficulty as an economic analyst, in finding what it is that the Australian classification is classifying.

Then at page 2538 .13 this answer is given:

Q: Well you have used the term "higher skills" on a number of occasions now. On what basis do you say that male trades have higher skills. What do you mean by "higher"? What is the determination of that particular ascription of those skills?

A: Well in the end the demand for a product, the supply and demand for labour in purchasing that product as well as training experience and so on determine the remuneration and by and large in an increasingly open world, open trading world, skills are rewarded by pay. So I conclude that since these trades have a higher pay, they are higher skilled. Just like doctors I suppose earn more than cleaners.

It appears to me that assumptions of this kind really beg important questions for this Inquiry and certainly suggest the need for a detailed and comprehensive evaluation of the respective worth of male and female trades rather than for a contrary approach.

I do not consider that the French study referred to in the Employer's Federation/Chamber's submission (Ex 446 p 19), offers any better explanation of differentials in male/female earnings. The explanation set out was that "the main reason why any single industry (or firm) pays above average wages is that it employs workers with above average skills and abilities". The French study was Abowd, Kramarz & Margolis 1998: High Wage Workers and High Wage Firms, referred to by Professor Wooden in Exhibit 270 page 3. The paper is to be published in a forthcoming issue of *Econometrics* and a copy of it was not available for analysis.

I do consider, however, that the reference in that same paragraph to Professor Wooden's statement that "the biggest measurement problem is that of unobserved ability", is very relevant to the difficulties in formulating possible remedial measures to satisfy the second Term of Reference.

Furthermore as to the Kidd and Meng study (1997), Professor Gregory notes there are only seven occupations examined. Anne Hawke in "Male-Female Wage Differentials: How Important is Occupational Segregation?" (1991) (Ex 408) looked at 8 occupational categories in Australia and 5 US occupational groups and concludes that the majority of the variation in wages by gender is unexplained when allowing for within and between occupational wage variation. However, she says further research is required to establish why occupations are so important to the gender wage differential, and to estimate the sensitivity of within and between occupational variations to the specification of the occupational groups (pp 16-17).

I conclude that both 'intra' and 'inter' occupational wage differences significantly contribute to the male-female wage differential. I further conclude that, at least with respect to 'inter' occupational differences, and having regard to occupational segregation effects on wages, adjustments in salaries in occupations which are female dominated, could have the effect of narrowing the wage differential between men and women and so address any inequities existing in relation to that differential.

EFFECTS OF SEGREGATION

It is contended for the Employers' Federation/Chamber, quoting Professor Wooden with references to Professors Gregory and Green, that occupational segregation is not the main, or even a major reason, for differences in men and women's earnings (Ex 446 p 18). They also refer to parts of the evidence when it is stated that the occupational segregation identified makes a small contribution to the overall pay gap. I have earlier made conclusions, which I shall not repeat here, as to the size of the unexplained wage differentials. There are, however, some other contentions to which I will now turn.

The first issue to be addressed here is the explanatory capacity of models designed to identify the cause and size of the pay gap. The human capital model does have a limited capacity to explain the gap. Professor Gregory indicates that the human capital model can explain about half the gap (Ex 99 p 5). Moreover, the human capital theory explains about 20%-30% of the variations that are observed in earnings (Ex 99 para 15). He notes that other factors, which are important and are not explicitly allowed for, are:

- (a) the role of the state
- (b) restrictions in competition among professions
- (c) the contribution of the size of firms
- (d) the role of union coverage
- (e) effect of occupational crowding (Ex 99 para 15). The notion of overcrowding is that women are crowded into a few occupations thereby reducing the demand for female labour

relative to supply (which in turn depresses women's earnings) (Ex 99 para 20).

Professor Gregory points out that 60% of the variation of the earnings of individuals is unexplained in the study by Professor Wooden, because the methodology employed cannot be completely successful due to data limitations. There is a gap for other variables to contribute to the explanations of earnings dispersion (Ex 100 para 14).

Furthermore there is also a variety of criticisms and identification of limitations in relation to human capital theory. Professor Gregory nominates some of these in paragraph 18 of Exhibit 99 as follows:

- (i) Within the human capital model the variables of importance are often not measured well, e.g. labour market experience.
- (ii) there are substantial differences in pay across industries that cannot be explained by measured human capital variables.
- (iii) there are substantial differences in pay across occupations which cannot fully be explained by human capital variables.
- (iv) across countries it is clear that labour market institutions matter, centralised wage bargaining systems generating less gender wage inequity than non-centralised systems.

The National Pay Equity Coalition (NPEC), Women's Electoral Lobby (WEL) and Australian Federation of Business and Professional Women's

Association (AFBPWA) discuss some of the limitations in the assumptions on which the human capital theory is based. For example, it is argued that the human capital theory assumes that women and men freely compete in the labour market and that their access to education and training and full-time work, all of which instigate higher levels of remuneration, is unfettered by the division of domestic labour. It is also said that human capital theory also assumes that women and men will receive the same returns for the same investment (Ex 456).

However, what is clear is that human capital theory, despite its acknowledged limitations, is a conventional economic theory for examining earnings differences (Ex 99 para 8). It does offer some useful insights into the components of wage differentials which may be associated with gender inequities.

This is not to say, however, that the studies are not also valuable in attempting to identify the reasons for wage differentials and, for purposes of the present Inquiry, whether the differentials would be significant, in terms of the assessment of undervaluation. I have earlier discussed this consideration in this section. However, some further elaboration is useful. I refer to the answer given by Professor Gregory in cross-examination.

Q: Are you aware of any studies which show the value of work of men and the value of work of women is equivalent?

A: All the work that we do shows that when you try and measure the attributes of men and women in terms of their education, age and experience, they do not get paid the same amount in the labour market. We then show after you take into account all the different attributes there is still a pay gap there.

Then the question becomes what is the source of the pay gap and the answer to that is because we have not been [able] to measure things in the pay gap we are not quite sure what it is and people speculate - maybe it is discrimination [against] women, maybe it is occupation segregation, maybe women choose by choice lower paying occupations, maybe it is all sorts of things. That is why what Professor Wooden attempted to do was to try and measure exclusively the occupational segregation component to get an estimate of what part that would play in explaining the pay gap and no-one finds the occupational segregation defines all the pay gap but everyone finds it makes a contribution to the pay gap.

I find that the economic analysis of female-male wage differentials, whilst having some problems associated with aggregation and limitations in data sets, does have a significant explanatory capacity and that having regard to my earlier conclusions, occupational segregation, which is identified through that analysis, whilst relatively small in terms of the size of the overall pay gap, is nonetheless an important indicator of the existence of gender based wage differentials, or wage discrimination, as described by economists.

There is, however a second issue as to the effects of segregation. That is, the proposition that better measurement of the variables in regression analyses is likely to shed more light on the reasons for differences in men's and women's pay so that the gap will be explained out of existence.

I have no doubt that researchers will continue to expend and expand their best efforts to identify and take into account all possible variables to account for the pay gap. However, for the reasons appearing below, I would not look for an early or complete breakthrough that would result in the elimination of the gap.

Firstly, the studies are designed to eliminate non-discriminatory variables in order to identify areas of 'unequal treatment' of male and female workers. There is no evidence to show that better or different variables will necessarily reduce the residual component. Indeed, economic studies show a range of outcomes, depending upon the methodology employed.

Secondly, as Associate Professor Borland points out, the estimates of the size of the gender wage differential arising from unequal treatment of male and female employees in Professor Wooden's paper, and other similar studies, may represent an under estimate of the true extent of that differential. I have earlier discussed how such under evaluation may occur depending upon the methodology employed. Associate Professor Borland offers a further example:

The approach used by Wooden to decompose the total gender wage differential between a 'justified' component, and a component due to unequal treatment of male and female employees (that is, different returns on skill-related characteristics), assumes that any differences in skill characteristics (such as educational attainment) between male and female employees are unrelated to gender-based differences in returns to those characteristics. However, where there is unequal treatment of male and female employees one effect is likely to be that females will have less incentive than males to invest in skill acquisition. Attributing some part of the differences in skill characteristics between male and female employees to the unequal treatment of those employees would increase the size of the estimate of gender wage differential due to unequal treatment of male and female employees in Australia. The effect of a pay equity policy on the gender wage differential is also then likely to be correspondingly higher. (Ex 277, Annex 2, p 43)

Where Associate Professor Borland refers to 'unequal treatment' in

this context (and in other components of his paper) he uses the expression to refer to a situation where a male employee and a female employee with identical skill related characteristics receive different amounts of compensation for working in the same job. In the economics literature this is generally referred to "wage discrimination". Mr Cox defines the term "discrimination" in that literature as referring to unequal treatment relating to gender. He refers to gender discrimination as the gap when all other differences have been accounted for. If there is still a difference in returns, after adjusting for factors such as qualifications, then the remaining component must be "pure discrimination" (Ex 277 footnotes 5 and 6). This is also the context in which these expressions have been used in this section of the report.

It is noteworthy that Associate Professor Borland points out that, having regard to Wooden's 1997 findings, and, if the structure of wages were changed so that the gender composition of occupations would have no effect on earnings of individual employees, then the reduction in the differential would be from about 12 per cent to 8 per cent, and in the case of non managerial employees the reduction in the size of the gender pay gap would be from 9 per cent to 7 per cent. The remaining component of the gender wage differential, following implementation of what Associate Professor Borland calls the 'comparable worth policy', would be partly due to levels of skill related characteristics, such as educational attainment and labour force experience, being lower for females than for males, and partly due to females receiving lower returns to those skill related characteristics than males (Ex 277, Annex 2, p 5-6).

The Labor Council refers to the work of Malcolm Langford who estimates that "40-50% of the gender wage gap is the result of women's choices concerning human capital, demographic and job status while 50-60% of the wage gap is due to employer discrimination" (Ex 361 Langford 1995 p 76).

A further illustration of this limitation arises in relation to casual employees and demonstrates why underestimates may occur. Professor Wooden includes casual employees as a variable in the regression analysis, and therefore took out the influence of casual employees in relation to occupational concentration. This raises a series of interesting matters. The regression analysis demonstrated that a negative wage premium of about 6% was associated with casual employment, notwithstanding the wage premium normally associated with those engagements. Leaving aside for present purposes the discussion of casual employment raised by Ms Bennett in her evidence, to which I will return, Professor Wooden explains the outcome for casual employment in a manner significant for the Inquiry as follows:

- (i) the premium for casual employment might not automatically translate into a higher wage because casual employment is likely to be over represented within employment outside of the award system as well as being a group of employees more vulnerable to evasion of award conditions;
- (ii) alternatively, the negative wage outcome may be as a result of casual employment status acting as a proxy for unobservable job characteristics of those employees which may be associated with low wages, such as lower skill requirements (Ex 101 p 7).

In support of the notion that the pay gap may be 'explained', it has also been argued that the empirical estimates do not, for example, appropriately

control for the impact of career interruptions. However, in this context, Professor Wooden stated that if better measures of career and experience were available only “slightly different conclusions” would be reached. In the same context, however, he says that the data set he has used in his study is as good “as anyone has ever used in Australia”.

Professor Green discusses some possible limitations in the modelling which may result in larger differentials being found. He says that the model specified by Professor Wooden estimates a constructed independent variable. This, he states, is inadequate for two reasons. Firstly, it uses aggregate data which Professor Green earlier argues is inadequate. Secondly, actual earnings are approximated using the midpoints in each income category used. The accuracy of the approximation is therefore entirely dependent on whether or not the midpoints are representative of the category, that is, they are equal to the average for the category. This is unlikely as it would imply that the income values are normally distributed (Ex 271 para 102).

Professor Gregory acknowledges that women do not earn the same amount as men as a consequence of the interruptions of their career. However, he states that:

for our purposes here that is not really the issue. The issue is, is the degree of interruption in female occupations greater than it is in non female occupations? Is that the reason why female occupations seem to be paying less and the answer is that we have no evidence on that and my conjecture is that degree of interruption is probably much the same across all occupations and therefore while the career interruption story can explain the average wage of women compared to men, it does not explain why some women's occupations get less than they do outside.

There can be no doubt that there are, as previously discussed, unexplained variables, particularly from factors which are hard to measure, such as the degree of commitment to careers. However, the analysis by Wooden, Gregory and other analysts such as Miller represent the high point of economic analysis of this kind and, within available methodologies, continue to suggest the existence of wage differentials based on gender.

In my view, the significance of the conclusions as to gender inequality in wage differentials identified in the economic analyses I have referred to cannot be brushed aside on the basis that some further analyses or research might either lead to different results, or even narrow them. I agree with the statement of Professor Gregory made during cross examination:

So it is possible that the differential we are seeing still today is partly - is a result of continuing undervaluation of women's skills. Is it possible that that is a factor?

A: Yes. That is what people are implying I think when they talk about the occupation segregation. They are saying that there is something about those activities and those occupations where women are disproportionately represented which gives them lower rates of pay after you take into account all the sorts of things like size of industry, education. Now the reason we think its women's occupations that is doing it rather than something else is that when you look at the per cent of women in the occupations it is clearly associated with it in lower rates of pay. Now if you tell me some other credible factor which was associated with female occupations it could be responsible but it has to be something associated with the females and the occupations and at that time most obvious to think about is the females and occupation itself.

There was a further set of contentions which focused less on whether a 'pay gap' existed or if occupational segregation accounted for gender

based wage disparities or inequities, but more on whether any award based remedies for such disparities would be efficacious, or whether they were desirable, having regard to countervailing or counterbalancing considerations. I will now turn to deal with those contentions.

CENTRALISED AND DECENTRALISED WAGE FIXING SYSTEMS

A further and related proposition has been advanced by the Employers' Federation/Chamber that wage decisions of the Commission have not succeeded in, or are not applicable to, the narrowing of a gender earnings gap. Hence no steps should be taken by the Commission to intervene in relation to wage differentials. The justification for this contention is that:

- (i) The gap is established by market forces outside the control of the Commission.
- (ii) Female employees' wages have improved relative to male employees since 1985; and
- (iii) Movements in real wages in developed countries suggest that the gender pay gap has narrowed more in decentralised labour markets. This contention is put largely upon the basis of a table appearing in the Employers' Federation/Chamber submission at page 24 (Ex 446) which table was not tendered during the proceedings and is not evidence before the Inquiry. However, I will deal with the propositions put for the sake of completeness and compare them with the actual evidence in the Inquiry.

Gregory and Duncan in their article "Segmented Labour Market Theories and the Australian Experience of Equal Pay for Women" (Ex 361) consider the classic economic analysis of occupational segregation and segmented labour markets appearing in the works of Lester Thurow [entitled "Generating Inequality; Mechanisms of Distribution in the US Economy" (Ex 361)] and Peter Doeringer and Michael Piore [entitled "Internal Labour Markets and Manpower Analysis" (Ex 361)]. The authors considered two aspects of the dual labour market theory namely:

- (i) In the short and medium term, the economy generates jobs in both markets at differential rates that are largely independent of relative factor prices; and
- (ii) classes of workers - which can be characterised by sex, race or social background - tend to be confined to one or the other of the labour markets, and those who begin in the secondary market have very little prospect for crossing the boundary into the primary market (at 403-404)

Gregory and Duncan tested the premises of the dual labour market theorists against the actual results of the 1969 and 1972 Equal Pay Cases and found that the essential characteristics of segmented labour markets, as delineated by these theories, were accurate when tested against the outcome of those pay cases in Australia.

The hypotheses tested, based on outcomes to be expected, if the segmentation theories were correct, in having regard to the equal pay decisions, were as follows:

- (i) The equal pay decisions of the tribunal should not be the result of economic forces, such as the relative shortage of supply of female workers, but should be determined exogenously.
- (ii) The wage decisions of the tribunals should not be countermanded or offset by market forces; that is, actual wage changes should reflect minimum wage changes;
- (iii) The employment response to the wage decision should not be large in terms of substitution away from female workers. The very forces that segmented the labour market in terms of job opportunities for females should now protect female labour against the loss of job opportunities as a result of equal pay.
- (iv) The relative rate at which female and male jobs are generated should be largely independent of the equal pay decision.
- (v) Finally, the wage effectiveness of tribunals, and the limited employment response to the large change in relative wages, should bring about a large change in the distribution of income. (p 405)

These conclusions were sustained in the analysis and broadly speaking the authors concluded that female employment continued to grow faster than male employment after the wage adjustments arising from the Equal

Pay decisions. The decisions were translated into a large change in relative earnings and significant changes in income distribution in favour of working females (p 427).

Professor Green expressed the opinion that this analysis by Gregory and Duncan was correct and was currently valid.

These conclusions by Gregory and Duncan largely remained unchallenged during the proceedings, including in the final submissions of the parties, although clearly employer parties did submit that changed circumstances from those which prevailed in the 1970s and 80s would result in a different employment impact if wage increases of that kind were introduced now. It was argued, although with some apparent inconsistency, that introducing wage increases in female occupations would only have the effect of encouraging more entrants to those segmented markets and increase female labour supply, which is said to increase segregation.

The conclusions reached by Gregory and Duncan effectively counter the proposition that the gap is established by market forces outside the control of the Commission. Further, the fact that females rates of pay have increased relative to men's from 1985 might be explicable on a number of bases, including the value of wage movements for low income earners under a centralised wages system since that time.

As to the proposition that the pay gap has narrowed in decentralised labour markets, more than in crude centralised wage systems, I firstly note that this contention is based upon an analysis of real earnings growth and not on an assessment of the gender pay gap or pay ratio *per se* (Ex 446 p 23-25). A further deficiency is that the analysis commences in 1985 and does not take into account, either the relative gender pay gaps between the various countries being examined, or the movement in relative pay gaps which occurred after the 1972 Equal Pay decision in Australia.

The countries identified in support of this submission are Canada, Japan, New Zealand, UK, USA and Korea (Ex 446 p 25). However, as Professor Gregory notes, both Australia and Scandinavia have a higher pay ratio than most other countries (Ex 99 para 2). Table 1 of Exhibit 99 demonstrates that Australia maintains the fourth highest ranking of selected OECD countries throughout the period 1968-1987 in relation to average female earnings as a percentage of average male earnings. Indeed at all relevant stages during that period it was significantly better placed than New Zealand, UK, USA and Japan.

Table 1 also makes clear that a significant change in Australia's relative position occurred during the period 1968-1977. This, no doubt, relates to the equal decisions of the late 1960s and early 1970s. This outcome is confirmed in the article by Michael Kidd and Xin Meng entitled "Trends in the Australian Gender Wage Differential over the 1980s; Some Evidence on the Effectiveness of Legislative Reform" (Ex 361) where they state:

It is widely recognised that the equal pay initiatives led to substantial wage gains for females. Short (1986) demonstrates that the female weighted average hourly minimum award rate rose from 72% of the male weighted average hourly minimum in 1968 to 94% in 1977. Similarly, Gregory and Duncan (1981) report that while females earn 59% of male full-time weekly earnings in 1964, by 1977 average female earnings had risen to around 77%. These gains outstripped any other countries performance over the same period (p 31).

However, Kidd and Meng identified that in sharp contrast to the rapid decrease in the gender wage gap over the 1970s, aggregate ABS figures highlight stagnation in the 1980s. During this period the ratio of female to male average weekly earnings for all employees remained at around 65% and for full-time employees it increased only slightly from 76% in 1982 to 79% in 1990.

A more recent study produced by Professor Gregory in his evidence, that being an OECD publication titled "Labour Market and Social Policy - Occasional Papers Number 26: The Concentration of Women's Employment and Relative Occupational Pay: A Statistical Framework for Comparative Analysis" (Ex 435) shows that in the period 1980s to the 1990s the elimination of the pay gap in Australia slowed and in some respects ceased. Table 7 of this paper demonstrates that whilst the female average hourly occupational pay relative to the average hourly pay of male full-time workers in all sectors, otherwise known as the wage penalty associated with the concentration of female employment among occupational groups, declined in Australia between 1987 and 1995 from approximately 82% to 80%, the position of women in full time employment did not decline.

However, the evidence concerning the pay gap does not support a conclusion that a decentralised system better eliminates gender wage differentials. Throughout the period 1972 to the 1990s Australia maintained a relative position ahead of decentralised economies referred to in the OECD publication (Occasional Papers No 26), namely the UK, Canada and USA.

Overall, the authors of the OECD Occasional Paper No 26, Damian Grimshaw and Jill Rubery, concluded that the average wage penalty for all women, full-time and part-time workers combined, or the total gender wage gap, decreased only marginally for the countries examined, even though in some countries, such as the USA, women's average pay increased significantly and, in Australia, there was some deterioration in the gender pay gap. Moreover, in relation to the relative size of the average wage penalty, the average wage penalty experienced by all women in employment is relatively small in Norway and Australia and relatively large in the UK and West Germany. This position is maintained notwithstanding the high level of occupational concentration in Australia which was maintained over the period to 1995 (Ex 435 pp 16, 17, 28, 29).

The decline in the relative pay position in Australia over the period 1987 to 1995 is accounted for by the authors of the Occasional Paper on the basis of changes in relative earnings of individual occupational groups, as well as on changes in the occupational groups that constitute the top five ranking of female concentrated occupations in the study. Significantly, the relatively good position of part-time workers, in terms of wage penalties, when compared to full-

time workers in Australia in the 1980s had been reversed by the 1990s so that the gender pay ratio for part-time work dropped substantially. In the result there is a relative gain in the gap for full-time workers in Australia but a significant decline for part-time workers over the same period, which seem to account, at least in part, for the shift in the Australian position.

Moreover, Kidd and Meng (1997) point out that whilst institutional wage changes in the 1970s significantly narrowed the wage gap, anti discrimination legislation which was later introduced had only a small effect on narrowing the wages gap. Rather than identifying a deficiency in the centralised system, these considerations would suggest that award wage movements under that system is capable of narrowing the gap and could well play a significant role, both generally and in particular, in relation to part-time work.

It is also quite conceivable that shifts in Australia towards decentralised systems, and perhaps aspects in the changes of the centralised system, during the period after 1987 may account for the relative decline.

The contention that decentralised systems better redress the gender pay gap is simply not sustained on the evidence. I agree with the conclusion reached by Professor Gregory and the OECD report that centralised wage fixing has tended to produce higher pay ratios for women, relative to men, and a narrower pay gap between women's pay in segregated occupations relative to women's pay on average.

I propose to address separately in this report the particular issues concerning enterprise bargaining and part-time work raised in the various submissions of the parties.

SELF SELECTION OR CHOICE

A significant point of debate in the proceedings concerned the question as to whether or not any pay gap relating to occupational segregation could be explained, at least in part, on the basis that women chose to work in lower paying occupations because there were compensatory non wage features of those occupations. The proposition of self selection was accompanied by a variety of submissions in which it was contended that it would be inappropriate or unhelpful to increase wages in low paid areas. Some of these arguments can be summarised briefly as follows:

- (i) Occupational segregation in Australia may be a result of, rather than a cause of, differences in male and female pay (this was accompanied by an argument that workers in these areas may be over compensated); (Ex 446 p 28)
- (ii) The payment of additional monies may in fact only further attract women to the female ghettos because of an increased attractiveness of the job. (Ex 446 p 30)

A related submission was that the introduction of regulatory mechanisms and the payment of wage increases to compensate for

occupational segregation was unfair, because segregation related to non market factors, such as the domestic division of labour, lower attainment levels in education and experience, and work preferences, together with occupational choices per se.

The Labor Council contended that these propositions were based essentially on human capital theory, which theory posits that women choose different occupations in response to different family roles and inter active patterns of work. It further put that there is a lack of empirical support for such propositions and the employer contentions fail to recognise the effect of occupational segmentation.

It should also be noted that both proponents of these arguments discuss in this context whether or not occupational segregation relates to inter or intra occupational factors. I have discussed these considerations earlier but I note that the Labor Council in Exhibit 437 paras 57-62 additionally argues with some force;

- (i) upon the evidence of Professor Gregory, the higher the level of occupational segregation the more likely pay differentials are attributable to the effect of inter occupational segregation.
- (ii) There are both horizontal and vertical segregation factors involved in occupational segregation.

The concept of choice or self selection emerged in the proceedings

through the evidence of Professor Wooden in Exhibit 101. There are really two distinct but related arguments advanced by him:

- (i) in explaining the need to exclude overtime from the analysis of wage inequities, Professor Wooden considered the argument that lesser access to overtime is in itself discriminatory. He answered this proposition by referring to the “likelihood” that the working time preferences of many women may not be consistent with overtime. In a similar fashion, he stated that women exhibited stronger “preference” for part-time employment. In the result, it was argued that it was reasonable to expect that preference for hours over and above the standard week were likely to be weaker among women (p 2-3);
- (ii) having concluded that there was an average gender earnings differential, and a component of that differential resulting from gender based occupation segmentation, Professor Wooden warned against using wage adjustments to attempt to address that gap. One factor which he considered important was that women may select into relatively low paying occupations because of “other offsetting positive work conditions”. (pp 10/11)

I shall address the second component of Professor Wooden’s analysis in this section of my report. The issue of preference for hours in part-time work will be dealt with in a later section concerning part-time employment.

The first matter to be borne in mind in considering the second part of Professor Wooden's evidence on this question, is that it does not derive from the regression analysis conducted by him per se, but relates to opinions he holds, described by him as "somewhat more speculative" than the regression analysis he had discussed in the first part of his paper.

Professor Gregory identified the empirical questions raised by Professor Wooden's statement as consisting of two parts as follows:

- (i) do female dominated occupations have better non wage conditions which enable the employer to offer lower wages in compensation;
and
- (ii) do women, rather than men, prefer these better working arrangements so that it leads to female dominated occupations?

(Ex 100 para 16)

Professor Gregory stated that he did not know of any study that answered either of these questions and indicated that he would be surprised if either of them were correct. Professor Wooden in fact agreed that there had not been any study which specifically addressed the two questions identified by Professor Gregory.

During cross examination Professor Wooden did discuss the relevance of occupational choice to his regression analysis. He questioned the use of assumptions which contained notions of free choice for women moving

into segregated industries. Indeed he agreed that the reasons that a choice is made to predominantly female occupations is based on historical factors and the capacity to work in the environments in question.

Professor Wooden's views became more sharply expressed in the later exchanges with other experts. This may be illustrated by the exchange with Dr. Whitehouse. Dr Whitehouse argues that the notion that women make unrestrained choices about jobs is problematic. She contends that most low paid occupations do not have compensating conditions. As to part-time employment she argues that it is not clear why shorter working hours or hours flexibility should be traded off against other conditions of employment when considering the wage differential. (Ex 120 paras 3 and 4).

Professor Wooden's response to Dr Whitehouse in Exhibit 109 contains for the first time the proposition, later relied upon in submissions by employer parties, that the high level of occupational segregation may be the result of, rather than the cause of, the observed pay equity levels. He also argues that as a result of centralised wage fixing processes, female dominated occupations may in fact be over compensated, given their human capital endowments. These are the bases for some of the employer contentions in these proceedings. There is no supporting material offered for these statements by Professor Wooden although there is a reference to the work of various authors such as Kidd (1993), Vella (1993) and Kidd and Meng (1997), which works concluded that measures of occupational concentration will reflect, at least in part, the individual's occupational choice, again a proposition put in the

employers' submissions.

It seems to me that at this point the debate widened beyond the original concurrence that there was little empirical basis for the proposition that occupational choice may explain the wage differentials. Indeed, Professor Wooden's reply in Exhibit 109 was never subjected to cross examination because of the timing of its receipt in the proceedings. I have simply compared this evidence with other evidence I have received on the topic.

Professor Green challenged Professor Wooden's statement as to self selection as being typical of a neoclassical model and challenged whether there was any proper basis to assume choice (Ex 271). Professor Wooden in Exhibit 270 responded to this criticism by saying that like Miller, he treated occupational distribution as exogenously determined in contrast to other economists more faithful to neoclassical doctrine such as Kidd (1993), Vella (1993) and Kidd and Meng (1997) (Ex 270 para 4 (a)). Professor Green in his oral evidence agreed with this assumption arguing that:

Choice is constrained by exogenous factors, in other words by the structure of labour markets, by the history of occupations and by custom and practice, and this is a point that is being made by a number of authors, including the analysis of Thurow and Doeringer and Piore, who have pointed to the extent and spread of dual labour markets in most western countries, particularly in the United States, and they were writing in the 1980s.

Dr Suri Ratnapala contends that if occupational segregation is found not to result from discrimination it can, arguably, be said to reflect the personal choices made by women. This is based upon an assumption that

rational human beings would not ordinarily choose lower paid jobs unless they felt compensated in other ways. He says that in this event the moral argument for comparable value analysis loses much of its force (Ex 262 p 7). Dr Ratnapala agreed, however, that the questions formulated by Professor Gregory in Exhibit 100 (para 16) were valid. He knew of no empirical data to support his conclusions or to answer the questions raised by Professor Gregory. Significantly, in terms of Dr Green's analysis, it should be identified that Dr Ratnapala advocates that wages and conditions should be determined entirely by the market without any interference by third parties. Dr Ratnapala considers that the value of work is essentially the value affixed by the employer and relies upon the work of Fischel and Lazear to support his contentions (Ex 262 p 5). However, he disagrees with Fischel and Lazear's critical analysis of market based assessments or comparable worth in the following evidence:

Q: If we could just come back to the earlier discussion we had about markets. I wondered if you could just consider this quotation that I am going to give you from the authors Fischel and Lazear that you refer to in a number of places in your statement. They say this, page 894 of the article.

While this standard market critique of comparable worth is powerful, it is not compelling. Many situations exist where market prices are not accepted as final. In anti trust cases, for example, a common inquiry, is whether prices charged to consumers are too high as a result of the exercise of market power. Similarly, in cases under the Equal Pay Act the effect of alleged discrimination on wages paid to men and women is critical. Unless one is willing to argue the market price should be accepted as dispositive in these other contexts, the standard market critique of comparable worth is not entirely convincing.

Is that consideration that you would accept, Dr Ratnapala?

A: No, I would not. If I may clarify that answer, I do not agree with Fischel and Lazear on that.

Professor Emerita Hughes contends that women make different choices than men do in the trade-offs between work participation and the nurture of children and families. However, she recognises that the choices differ between low and middle and high socio-economic areas. In low socio-economic areas, poor education and training result in low earnings compared to child care costs. Women in these circumstances are said to have little choice but not to work, particularly where their English skills are low or where they are heads of single parent households (Ex 329 p 6). She distinguishes part-time work and, in particular, the distribution of preferences for working part-time work between different social classes (Ex 329 p 8).

What is significant in Professor Emerita Hughes' analysis, is the recognition that self selection or choice cannot be approached on the basis of some uniform assessment of women's preferences. She recognises that occupational choices may well be exogenously determined particularly in low socio-economic groups. The following example is given in her evidence:

Q: Well let us consider then the proper evaluation of women's work. You have indicated in your statement that there is a choice attached of where women might go and you also indicate the difficulties in ascribing value to work outside the market forces, but by that evidence are you suggesting that people say working as outworkers in the clothing industry, are being remunerated fairly or properly according to the value of their work?

A: Of course not. They are all illegal workers. Quite often the majority are illegal workers. I think the situation is absolutely appalling and I think it is a situation where Australia really must do something about it.

In my view, this issue is best resolved by distinguishing between those contentions which concern econometric analysis, as described by Professor Wooden in Exhibit 109, and policy considerations, and any empirical basis for them, which he referred to in Exhibit 101.

As to the first of these considerations, there seems to be no reason on the evidence to prefer the methodology adopted by Sorensen (1989), Kidd (1993), Vella (1993), or Kidd and Meng (1997) over that of Miller (1994) or by Professor Wooden in his evidence. In other words, there is a sound basis for treating occupational distribution as exogenously determined.

As to the second consideration, in the absence of any empirical studies to the contrary, I consider that I should be guided by the evidence in the proceedings. This evidence does not suggest that women's preferences for the occupations are determined by some non wage compensatory conditions or benefits. For example, in the hairdressing industry there is much non paid after hours work performed by the essentially female occupation. More particularly, it would be ludicrous to suggest, and no party in the proceedings did so, that outworkers in the clothing industry performed work in that low pay ghetto because of some non wage compensations, either associated with the nature of the work, or other benefits received, such as hours of work or particularly advantageous conditions. Such additional flexibility for child minding which was obtained by working at home was lost by the excessive number of hours often required to be worked, and the time constraints and pressures placed upon these workers to meet deadlines and production targets.

I am reinforced in this view by the conclusions reached Associate Professor Borland in his paper annexed to Exhibit 277 in the proceedings. He considered an alternative explanation for the persistence of gender wage differentials in Australia, namely that all of the remaining gender wage differential represented differences in non-wage compensation, such as leave entitlements or fringe benefits, or in job conditions between male and female employees. He compared this contention with the "equalising differences theory" posited by Rosen (1986). In short, this theory studies labour market outcomes, where there is a competitive labour market and labour is perfectly mobile between alternative jobs in the economy. In such a market there should be a tendency for the 'net advantage' of working in different jobs throughout the economy to be equalised. That is, total compensation minus the opportunity cost of working in a job will be equal across jobs (paras 9 and 10).

Associate Professor Borland indicates that existing empirical studies on the gender wage differential apply measures of employee compensation based only on wage and salary payments, and generally do not control for differences in amenities and disamenities associated with different jobs in the economy. He then points out that the equalising differences theory of wage determination, however, suggests that the net advantage of employment depends on all components of compensation, and on job conditions. Therefore, despite evidence of a gender wage differential in Australia, it is theoretically possible that the net advantage of employment for males and females is equal (para 11).

However, Associate Professor Borland then posits the question - "what should be concluded from this discussion on the causes of gender differential"? He answers the question as follows:

Unfortunately, we do not have evidence to directly assess how information on non-wage compensation or on job amenities and disamenities would affect estimates of the gender wage differential. However, it does seem important to note that in empirical research on the determinants of individual wages, the equalising differences theory of wage determination has not been found to be able to explain much more than about one-half of the total variation in individual earnings in Australia (see for example, Preston, 1997). Even proponents of the theory of equalising differences such as Rosen (1986, p 643) accept that '... it seems fair to add the point that search, information costs and other omitted factors sustain significant wage variation among measurably identical jobs and workers'. Hence, in the absence of direct evidence that the gender wage difference can be explained entirely by differences in non-wage compensation or job conditions, and with evidence which appears to suggest that workers in female-dominated occupations earn less than comparable workers in other occupations, it seems reasonable to conclude that some part of the gender wage differential should be contributed to unequal treatment * of male and female employees.

[*In an endnote, Professor Borland stated that the term "unequal treatment" is used to refer to a situation where a male employee and a female employee with identical skill-related characteristics receive different amounts of compensation for working in the same job. As previously noted, in the labour economics literature this is most generally referred to as "wage discrimination".]

Accepting that some part of the gender wage differential is due to unequal treatment of male and female employees suggests that there may be an important role for pay equity or comparable worth policies as an instrument to redress the effects of that discrimination. The primary motivation for implementing this type of policy would generally be considered to derive from its equity effects. To the extent that achieving equal treatment of gender groups in the labour market is part of a government's equity objectives a pay equity policy can be seen as consistent with that equity goal.

Of course, traditional welfare economics suggest that policy-makers should take into account both efficiency and equity consequences of proposed policies. (paras 12, 13 and 14).

It should be noted, and this will be discussed later, that Associate Professor Borland goes on to discuss both equity and employment issues. He notes that to the extent that equal labour market treatment of males and females is part of an equity objective, and existing wage differences reflect unequal treatment of male and female employees, implementation of the pay equity policy should improve equity outcomes (para 28). Employment and efficiency questions will be considered elsewhere in this report.

AGE EFFECTS

It was submitted by the Employers' Federation/Chamber that a highly significant conclusion reached by Professor Wooden was that earnings differentials in the early years of the labour market (up to the age of 30) show no gender earnings gap. It was submitted that it would appear that different occupational choices and career breaks have a strong effect on women's earnings after some time (Ex 446 p 22).

In his evidence, Professor Wooden suggested that the data contained in Table 3 of his statement of evidence (Ex 101 p 12), demonstrated that earnings differentials actually favour females for persons under 30 years of age and the contribution pay differentials from occupational segmentation of jobs amongst this group is negligible. It was suggested that occupational based

inequity in pay across sectors will work itself out over time (p 11).

Dr Whitehouse states that as Professor Wooden himself suggested, earnings disparities are likely to re-emerge among older age groups as women take on more domestic responsibilities and men continue to pursue uninterrupted careers (Ex 120 para 5). Though she said that those problems are not amenable to correction through comparable worth strategies, she expressed the view that the assertion that the market or general trends are likely to erode gender inequalities over time is highly questionable. Mr Stinson expresses similar conclusions to those of Professor Wooden as to the under 30 age group (Ex 279 p 5). Professor Gregory considered that the findings of Professor Wooden were surprising (Ex 100 para 20).

Professor Green considers that Professor Wooden's conclusion that wage differentials disappear for the under 30 age group because of the lack of career breaks for females in that group, is inconsistent with his other conclusion that it could be expected that the wage gap will diminish over time, given the data available as to career breaks taken by the over 30 age group (Ex 271 para 108).

However, I consider that the most persuasive evidence in relation to this matter is found in the examination in chief of Professors Gregory and Wooden. Professor Gregory stated that it was clear that one of the reasons women do not earn the same amount of men is the effect of career breaks but that this was not the issue relevant to the existence of pay differentials.

Professor Gregory identified the relevant issue as follows:

The issue is, is the degree of interruption in female occupations greater than it is in non female occupations? Is that the reason why the female occupations seem to be paying less and the answer is that we have no evidence on that and my conjecture is that degree of interruption is probably much the same across all occupations and therefore while the career interruption story can explain the average wage of women compared to men, it does not explain why some women's occupations get less than they do outside.

Professor Wooden considered that table 3 in Exhibit 101 demonstrated that there was a significant difference between the over 30 age group and under 30 age group and that the career break phenomenon was one possibility in explaining this phenomenon. However, he was then examined as to other possibilities. His answers suggest clearly to me that age differentials are not necessarily driven by career breaks. I might note in passing that it is not entirely clear to me that the phenomenon exhibited in Table 3 for the under 30 group should not be the subject of further scrutiny before final conclusions are reached about this younger age group. However, turning to the dichotomy between the age groups, over and under 30 years of age, Professor Wooden was examined as follows:

Q: Now I want you to consider that proposition that I have just put to you in the light of this statistic which I will just ask you to assume is correct?

A: Yes

Q: That in NSW at least now the median age for a woman having the first child ..?

A: Yes

Q: Is 29.3 years?

A: Yes.

The NSW Year Book No. 78 of 1998 shows that the median age of all women in NSW who gave birth in 1996 was 29.3 years compared with 27.6 years in 1986 (Ex 113).

Thus the examination proceeded on factually correct basis as follows:

Q: Now if that statistic is correct, it would suggest that you wouldn't expect to find significant changes occurring in the later age years, that is 30 to 44 and 45 and over, because of that, in other words, it is likely that the career break will occur in that later age group?

A: Yes, that's correct

Q: I wanted to suggest to you, there's one other possibility as to why that later age group, I'll put it that way, say 30 to 44 years or 45 years and over might show the trend that is seen in that table and that is because men obtain their maximum promotional opportunities in the years from say 30 to 50?

A: Well, that latter statement is definitely true. I think that's possibly true enough, a fair statement, that latter part of it.

Q: That is correct?

A: Correct

Q: That is just the factual basis I put. Would it not follow from that one possibility, I am not saying it is the only possibility, but one possibility is that whatever effects exclude women from occupations in promotion or career access, might nonetheless you would expect to find [prevalent] still in that 30 year plus group because that is the area where men are likely to acquire, as it were, the greater success or promotion or career opportunities?

A: Sounds fair enough

Q: So that it would follow at least on that possibility that if that trend were to continue, that one won't find an abatement of that difference for the 30 year plus group?

A: That's very plausible, yes, that's true.

I find from this evidence that on the balance of probabilities:

- (1) Together with earlier evidence I have discussed, the 'career breaks' phenomenon does not fully, or adequately, explain the wage differentials between men and women;
- (2) The male-female wage differentials are unlikely to wash out or dissipate over time;
- (3) Assuming that the differentials do not exist below 30 years of age, about which I still hold some reservation, it is likely that the pattern of wage differentials between male and female workers will continue unabated in later years, being the very years where peak earnings are obtained.

CONCLUSION

CONCLUSIONS ON STATISTICAL AND ECONOMIC ANALYSIS OF FEMALE AND MALE DIFFERENTIALS

- 1 In Australia and all OECD countries, women earn less on average than men. This differential in earnings is variously referred to as the pay gap, the gender pay gap or the gender or wage differential.
- 2 Economists refer to a pay ratio which is defined simply as a ratio of female and male earnings. At the present time, the pay ratio in Australia favours men when calculated on a per annum, per week or per hour basis, although the pay ratio rises as a unit of time becomes

shorter. This occurs because women, on average, work less weeks per year and less hours per week than men. In Australia and Scandinavia the pay ratio is higher than in most other countries.

- 3 The pay ratio in Australia increased significantly over the period 1969 to 1976 as a consequence of the Equal Pay Case decisions by Federal and State industrial tribunals in Australia in the later 1960s and early 1970s. These decisions markedly increased award rates of pay for females and the award changes were rapidly reflected in a change of earnings. The wage decisions were not countermanded or offset by market forces and the employment response to the decisions was not large in terms of substitution away from female workers.
- 4 The equal pay decisions did not eliminate the pay gap or bring the pay ratio to a one hundred per cent level. During the 1980s the decline in the pay gap in Australia slowed considerably and effectively stagnated. Indeed, between 1987 and 1995, the female average hourly occupational pay, relative to average hourly pay of male full-time workers in all sectors, slightly declined. The decline was not generally evident for full-time female employees but the position of female part-time workers declined substantially. Overall, Australia maintained a relative position ahead of other OECD countries in terms of the pay gap between 1972 to date.
- 5 However, estimates of the pay gap, or the pay ratio, need to be

approached with considerable caution, particularly in relation to assessments about the size of any pay gap or pay ratio or ultimately the causes of any pay gap.

6 In choosing a measure of the pay gap, it is possible to calculate it, using raw or unadjusted data as to the relative pay of male and female workers, using either hourly rates of pay or weekly rates of pay, or possibly annual salaries. The measurement will vary depending upon inter alia, whether the total earnings are considered, whether full-time adult employees are examined and whether managerial employees are included. For example, the earnings gap is 34.6 per cent when the total earnings for all employees is measured. This gap falls to 10.5 per cent if the earnings gap is measured for ordinary time earnings full-time adult non-managerial employees. If adjustment is made for hours paid, as distinct from actually worked, the measured earnings gap in ordinary time earnings for full-time non-managerial adult employees declines from 10.5 per cent to 9.1 per cent (Ex 101 pp 3-4).

7 Clearly then the estimates will vary depending upon which type of workers are compared and what factors are included in earnings.

8 Economic research has endeavoured to better explain gender wage differences by correcting or adjusting raw data for factors, such as skill and job related characteristics. The objective is to identify, or

estimate, the gender wage differential which would exist between male and female employees with identical skill levels working in the same jobs. Labour economists refer to this difference as “wage discrimination”. It essentially concerns an assessment as to whether there exists “unequal treatment” between male and female workers when all other differences have been accounted for. Naturally, these methodologies will involve judgements as to the type of workers to be compared and the factors to be included, for example managerial employees. This will impact upon the assessments.

- 9 This process of measurement, interpretation and explanation, whilst not conclusive, carried out by economists and labour market theorists is the most appropriate basis using aggregate or average data to make estimations of gender wage differentials for this Inquiry. In particular, this analytical approach enables the identification with some greater precision, although limitations in the methodologies exist, of the unexplained differential or wage discrimination as described by economists.
- 10 Occupational segregation refers to a situation where an increase in the share of females in an occupation reduces the earnings in that occupation. This is particularly significant. If occupational segregation adversely effects the earnings of women, then economic analysis posits a priori there is a gender based causation for the wage gap. More significantly, for this Inquiry, the existence of occupational

segregation demonstrates directly the undervaluation of the work of women engaged in the segregated occupations.

- 11 Original economic research placed before the Inquiry by the Employers' Federation of NSW was conducted by Professor Mark Wooden, using data as to earnings which is aggregative in nature. For example, in considering occupational segregation it measures the average effect of hourly earnings of the female proportion within an occupation.
- 12 Professor Wooden found that across all occupations the average effect of female intensity of an occupation on the hourly rate of pay of men and women is 6.2 per cent (if industry variables are excluded) and 10.4 per cent (if industry variables are included) (Ex 101 p 22).
- 13 In response to comments by Professor Green, Professor Wooden states that the results of his analysis are suggestive of substantial gender discrimination. Because he is not able to control for all productivity-related characteristics, the extent of discrimination will be over-estimated, (and that fact must be taken into account) when he says that the results reported suggest the following:
 - I. There is an 8.9 per cent pay gap between men and women (managerial occupations excluded).

- II. Occupational segregation contributes 2.1 per cent points to the pay gap.
 - III. With respect to other endowments (education, experience etc), women are actually over-remunerated, resulting in a narrowing of the pay gap of 2.8 percentage points.
 - IV. Given the above there is a remaining unexplained differential of 9.6 percentage points ($8.9 - 2.1 + 2.8$). This gap is often assumed (by economists) to reflect discrimination, i.e. this is wage discrimination in the economic sense (Ex 270 p 5).
- 14 On the basis of this research, if men were allocated across industries in the same way as women - and without changing the rate of pay in each occupation - the average pay ratio between men and women is changed by 2.1 per cent.
- 15 The occupational segregation component is relatively small. However, its very existence is significant for the purposes of the this Inquiry, because it demonstrates undervaluation. Moreover, upon the evidence before the Inquiry of expert witnesses, the estimates of Professor Wooden may arguably be on the low side of economic analysis of this kind. In particular, if changes to the methodology are employed, including the examination of managerial employees, and further, if non linear relationships and industry effects are taken into

account, it is to be expected the result may be larger.

16 I do not agree with the submissions which were put that the effect of occupational segregation is overstated or does not require attention, either because of its size, or because of the capacity through further research to explain away or reinterpret its impact. It is true that the economic modelling used to identify the pay differentials does have limitations, but the research represents the best available mechanism for identifying the gap based on data of an aggregative nature and is conventional in its use amongst economists, and in other theoretical discourse as to the existence of wage discrimination.

17 Furthermore, I do not consider that only "intra" occupational wage differences contribute to the differential, or that the wage differential will be washed out over time, a suggestion by some parties based on the finding of Professor Wooden of a virtually nonexistent differential for the under 30 female age group.

18 It was also submitted by the Employers' Federation/Chamber that the finding of any wage differentials or occupational segregation should not give rise to any adjustment in salaries for women whatsoever as:

- i. the gap could be explained on the basis that women choose to work in lower paying occupations, at least in part because of their non compensatory wage features; and

- ii. industrial tribunals have not, and will not, be able to influence the gender pay differential which is established by market forces outside the control of the industrial tribunals. Moreover, it is submitted movements in real wages in developing countries suggest that the gender pay gap has narrowed more in decentralised labour markets.

19 I reject these propositions. In the first case, in relation to self selection, a distinction needs to be drawn between contentions concerning econometric analysis and policy considerations. As to econometric analysis, there seems to be no reason on the evidence to prefer the methodology of some theorists such as Kidd and Meng over that of Miller (1994) or of Professor Wooden himself. There is a sound basis for treating occupational distribution as exogenously determined. As to the second consideration, and in the absence of empirical studies to the contrary, I consider the evidence in the proceedings before me, which I will turn to in later sections, does not suggest that women's preferences for occupations are determined by some non-wage compensatory or additional benefit. Indeed, at least part of the evidence, that relating to outworkers, demonstrates the completely opposite proposition, in that female employees are required to work in very poor circumstances which have now no compensating factors.

20 I do not accept the contention that decentralised systems better redress the gender wage gap. This is simply not sustained on the evidence before the Commission and I agree with the conclusion reached by Professor Gregory and in the OECD report tendered in the proceedings that having regard to international comparisons centralised wage fixing has tended to produce higher pay ratios for women relative to men and a narrower pay gap between women's pay in segregated occupations relative to women's pay on average (Ex 435).

21 Professor Gregory considered that Professor Wooden's methodology asked essentially two questions, standard in the economic literature. These were:

- i. across all occupations what is the average effect of the female intensity of an occupation on the hourly rate of pay of men and women? and
- ii. if men were allocated across occupations in the same way as women - and without changing the rate of pay in each occupation - how would the aggregate pay ratio between men and women change?

The answers to these two questions, based on Professor Wooden's analysis are 6.2 per cent, if industry dummies are excluded, or 10.4

per cent, if industry dummies are included, for the first question and 2.1 per cent for the second question.

However, Professor Gregory raises a third question which he essentially described as novel and which, in my view, is both relevant and important to this Inquiry. No other expert before the Inquiry disputed the question being relevant or its content. The question and Professor Gregory's notation in relation to it are as follows:

There is a third question which is not usually addressed. In any particular occupation is there a gender affect arising from the disproportionate representation of women workers.

Most of the emphasis in a Pay Equity Inquiry should be on the third question, the pay rates in different occupations and not the first two questions, the average effect of gender and the effect of the dispersion of gender composition across occupations (Professor Gregory's emphasis) (Ex 100 para 17 and 18).

I accept Professor Gregory's assessment that this question is important for this Inquiry. I shall consider the issues raised by it in the section of the report dealing with the occupations and industries selected pursuant to Term 1 of the Terms of Reference.

INDUSTRIES AND OCCUPATIONS

CHILD CARE WORKERS

DESCRIPTION OF THE INDUSTRY

Introduction

The child care industry is, in a recognised sense, a relatively new industry. It grew out of the provision of pre-schools and kindergartens for children under school-age and emerged as an industry probably in the late 1960s. Regulation began with an award in 1969 for non-teaching staff employed in children's services known as the Miscellaneous Workers - Kindergartens &c (State) Award. That award is the precursor to the current and principal award in the industry, the Miscellaneous Workers - Kindergartens and Child Care Centres &c (State) Award. Prior to regulation in 1969, pay for child care services was either extremely poor, or the services were provided by charitable institutions for free, or in private homes also for free (Ex 57 at 42). However, it is worth noting that by far the largest amount of child care is still performed on an informal, and unregulated, basis in the family home (Ex 57 at 13). As it is informal, and mostly unpaid, it is not regarded as part of the "children's services industry".

Women are the predominant employees in the child care industry. Estimates of female employment rates range from 90 to 95 % of all child care

employees (Ex 57 at 6; Labor Council Submissions at 8), a statistic which manifested itself in replies to inquiries from counsel assisting the Inquiry (Ex 29). According to some of the witnesses before the Inquiry the number of men participating in the industry is increasing, but at a very gradual rate, and men are moving away from the direct contact roles in favour of management.

The child care industry is one of the female dominated industries that typifies the poorly paid nature of work which is performed predominantly by women. The EPAC Child Care Task Force found in 1996 that pay rates for child care workers were below those for unskilled occupations, such as shop assistants or car park attendants. The Task Force said that the child care industry was out of step with the pay rates paid for workers with similar levels of education and training (Ex 57 at 6).

The child care industry is split into a number of sectors: long day care, pre-school, kindergarten, occasional care, vacation care, family day care, home based care and mobile services. Preschools and kindergartens are not the subject of the Pay Equity Inquiry's deliberations because they were not nominated by the parties appearing before the Inquiry. One of the larger sectors in terms of employees within the child care industry is long day care. It accounts for approximately 50% of all child care employees, not including preschools and kindergartens (Ex 57 at 7). Long day care is an appropriate section of the industry on which to concentrate because of the already comprehensive work done in this section of the child care industry by experts such as Rosemary Kelly (Exs 57, 58). As the name implies, long day care is a service that typically

supplies full-time or full-day care for under school age children.

The child care industry may be divided between services funded by the Department of Community Services and "licensed services" (although both are subject to regulation). The former category provides 61,000 child care places and the latter 111,000 places as at April 1997 (Ex 75 in reply to a request from counsel assisting). Similar figures are available from the Commonwealth Department of Health and Family Services for 1996. There were, in 1996, 184,280 children who were provided with Commonwealth funded places in NSW, of whom 113,000 were in long day care, 28,400 in family day care and 31,200 in outside school hours care. Of the long day care facilities, the community sector provided 27,600 children with places at 394 facilities, in the private sector 78,900 children received places at 1,003 facilities and in the non-profit, or employer sponsored sector, 6,500 children had places at 99 facilities (Ex 57 at 14).

As Rosemary Kelly has written, there is substantial competition in the child care industry. Although there is obvious competition between the community based not-for-profit child care centres and private centres there is also significant competition from informal home and family day care. Informal home and family day care are by their nature low cost, because they are not operated as child care specific facilities but rather utilise the home of the carer. "Informal home care" encompasses the use of services provided by relatives, such as the grandparents of the child. "Family day care" includes principally the provision of care in the home of the carer on a commercial basis. Such care is

often provided with a sponsoring agency such as a local government authority, church or community organisation (Ex 57 at 21). While family day care is subject to stringent requirements, such as restrictions on the number of children, cleanliness, safety and physical layout, it falls outside of the award system. Family day carers are regarded as contractors and are not covered by any award. Ms Kelly estimates that their wages are generally less than those of child care workers (in the strict sense). They do not receive long service, sick or annual leave nor do they receive superannuation or workers compensation coverage. In addition family day carers must cover maintenance of their facilities and any depreciation in value (Ex 57 at 21-22).

CHARITABLE ORIGINS OF THE INDUSTRY

It is without doubt that the current child care industry had its origins in charitable organisations. The two largest child care providers in NSW, the Sydney Day Nursery and KU Children's Services were both established with charitable purposes in mind. The former has been involved in child care for the last 90 years and the latter was established in 1895. The organisations were established to assist those who would now be regarded as women in low income groups for social aims which have changed dramatically in the last thirty years. The flavour of the purposes for which the organisations operated can be found in the decision of *Manuel CC* when he considered the first award in the area in *In re Miscellaneous Workers - Kindergartens &c (State) Award (68/457; 14/3/69; unreported)* (Ex 206):

“Mr Coleman, on behalf of the Sydney Day Nursery and the Nursery Schools’ Association stated that this Association was providing a service in nurseries and nursery centres for the proper care and education of babies and children of needy people ... [T]he Association provides this service to many in these categories such as widows, deserted wives, divorced persons, invalid mothers with children whose home environment is unhealthy, children of migrants so that the children can get proper schooling ... and they were to the foremost in suburbs which he regarded as the poorer suburbs...” (Ex 206 at 5-6)

During evidence taken for the 1969 Award, it was clear that the charitable organisations providing child care were reliant on public donations but were unable to compete with other charitable organisations such as those assisting disabled children. Funding was drawn from a combination of government and local government funding, fees received from parents and “red button” days (Ex 206 at 6). Not surprisingly many of those employed in child care organisations at that time did so on a voluntary or reduced wage basis. This was remarked upon by *Manuel CC*:

“...[I]f one looks at the [wage] rates currently being paid, they are, without fear of contradiction, extremely low by modern standards and should not be countenanced. They are not sufficient to maintain any worker at a decent or reasonable standard of living ... The rates appear to have emanated from what was a complete charitable system, the amounts paid over the years have been, as was put in this matter, at the ‘whim of the Committee’ and no doubt, as economical as possible, having regard to the fact the workers in the institutions were not dependent on it for their livelihood.” (Ex 206 at 11-12)

MAJOR EMPLOYERS IN THE NSW CHILD CARE INDUSTRY

Not for profit child care facilities play a major role in the child care industry. Two organisations stand out particularly: KU Children’s Services (the successor to the Kindergarten Union of NSW) and Sydney Day Nursery and

Nursery Schools Association. Evidence was taken during the Pay Equity Inquiry from both employer and employee representatives from KU Children's Services, Sydney Day Nursery, Lady Gowrie Child Care Centre, Redfern Day Nursery, Randwick Open Care for Kids (ROCK), Jelli Beanz Kindergarten, Blacktown Kindergarten Association and others. KU Children's Services and Blacktown Kindergarten Association are registered charities whereas the Jelli Beanz Kindergarten is a private child care organisation. Lady Gowrie Child Centre is an incorporated body under the *Corporations Law* but is also a non-profit "community based" organisation.

KU Children's Service operates over 130 facilities including 92 pre-schools and 38 long day care centres (in 1996) as well as other facilities such as before and after school care, occasional and mobile care, work based care and Adult Migrant Education Program child care for those attending English classes. KU Children's Services employs over 1920 people (Ex 38 and Ex 57 at 15) and is the largest private child care organisation in NSW. Sydney Day Nursery operates 21 long day centres, mainly in Sydney but also in the ACT and rural NSW. Ms Kelly estimates the two organisations ran 56 or 14% of the 394 community based long day care facilities in NSW in 1996 (Ex 57 at 15).

In addition, local government operates a large number of children's services in NSW, estimated at about 300 services in 1993: 148, or just under 50%, of those local government services were long day care facilities (Ex 57 at 15-16).

EMPLOYMENT STRUCTURE

A predominant number of child care workers are employed on a full-time basis. Ms Kelly quotes statistics that indicate that in 1992 53% of child care workers in community based long day care centres were employed on a full-time basis and 51% in private centres. For part-time workers the figures were 26 and 22% respectively and for casual workers 14 and 13% respectively (McNiece et al *Child Care Workers* 1995 Australian Institute of Health and Welfare quoted in Ex 57 at 25). However, Ms Kelly estimates on her own survey conducted for her 1997 report that amongst primary care givers the statistics were even more pronounced. She estimated in 1997 that 75% of primary care givers were full-time with 15% part-time and 9% casual. One of the clear implications of these statistics is that those working as ancillary staff at long day care centres are employed on a part-time or casual basis in greater proportions than primary care staff (Ex 57 at 24).

EMPLOYMENT AT EXAMINED CHILD CARE CENTRES

Employment statistics at KU Children's Services and Sydney Day Nursery are instructive. Of the 294 staff employed in long day care at KU Children's Services only 8 are male. A sizeable proportion of persons employed are part-time. In response to inquiries by counsel assisting (Ex 29) KU Children's Services said that they had 200 employees who were full-time and 79 part-time working in long-day care. They also have approximately 990 casual employees across all its operations (not just long day care), 250 of whom work each fortnight. Fifty per cent of the men employed by KU Children's Services are

employed in the two most senior ranks in the organisation as either Managers or Director/Teachers. No men are employed as Advanced Child Care Workers, whether qualified or unqualified, or as Child Care Workers (Ex 38).

At the Sydney Day Nursery 265 people are employed across its 21 long day care operations (including the ACT): 131 of those employees are employed on a full-time basis, 60 on a part-time basis and 74 as casual employees. Only 7 of the total employee number are male: 4 of the 7 men are employed on a casual basis with 5 of the 7 being employed as Child Care Workers, one as an Advanced Child Care Worker and one as a Director/Teacher (Ex 68).

At the Lady Gowrie Child Centre 125 people are employed: 115 of those employees are women with men filling only 10 of those positions. Only one of the positions in the child care section of the organisation is filled by a man and that is as a part-time worker in the kitchen. Thirty six of the 125 positions are full-time, 13 part-time and 76 casual (Ex 41).

The Blacktown Kindergarten Association Incorporated operates 6 children's services, including not just long day care, but also two preschools, casual care, occasional care and a learning support program. Long day care, casual care and occasional care are for 0-6 years old and the preschools for 3-6 years old. It employs 36 staff only 2 of whom are men: 19 of the employees are employed on a full-time basis, 12 on a part-time basis and 5 as casuals. The male employees are employed as the Executive Director and as a Child Care

Worker (untrained). Both are full-time employees. Accordingly all the part-time and casual employees are women (Ex 48). In response to a request from counsel assisting (Ex 29) a statement was received from the owner and operator of two long day care facilities known as Budgewoi and Bluehaven Jelli Beanz Kindergartens. Across the two centres there are a total of 24 employees: 19 of those are full-time, 3 are part-time with 2 persons employed on a casual basis. Jelli Beanz Kindergartens did not provide the Inquiry with a gender breakdown of their employees (Ex 42).

Counsel assisting also requested information from a number of smaller child care centres. At Randwick Open Care for Kids Inc, a single child care facility, 7 of the 8 employees are women. The sole male employee is employed as an Advanced Child Care Worker. Four of the employees are full-time, 3 part-time with one casual employee (Ex 45). At Kanga's House Child Care Centre Inc there are 22 employees: 20 of the 23 workers are full-time and the remainder part-time. The sole male is employed as a cook on a part-time basis (Ex 52). At the Uniting Church Engadine Long Day Centre, according to the testimony of Mr Foord, 13 people are employed, none of whom is male: 7 of the 13 are employed on a part-time basis and the remainder on a full-time basis. No statistics were provided as to the number of casual staff used (Ex 43).

Although not necessarily meant to be a representative sample, the above organisations examined by the Inquiry represent a substantial part of the long day care services provided in NSW. The total number of employees at those services, for which the Inquiry was provided with gender breakdowns, is

currently 476 with 455 or 95.6% being female and 21 or 4.4% male. The following statistics could also be drawn from figures received by the Inquiry from the above organisations on the number of full-time, part-time or casual employees:

Full-time	448	47.7%
Part-time	182	19.4%
Casual	309	32.9%*
Total	939	<u>100.0%</u>

(* The figures for casual employees are extrapolated for KU Children's Services and Engadine Long Day Care on the presumption that casual staff are employed at those services at the same percentage of the total number of employees as for the other child care providers.)

Child care centres are typically divided into the following employee hierarchies:

- Manager/Director
- Co-ordinator
- Teacher
- Advanced Child Care Worker - Qualified
- Advanced Child Care Worker
- Child Care Worker
- Nurse
- Clerical Staff
- General Assistants (including cooks, kitchen hands etc)

At the upper end of the employee hierarchy the title of the uppermost employee depends on the size of the organisation. Large

organisations, such as KU Children's Services and Sydney Day Nursery, are headed by an Executive Officer or a Director, who has overall control of the organisation's day-to-day operations and is accountable to the Board or Governing Committee of the organisation. Such organisations would typically have a Co-ordinator located in each child care centre who would have the day-to-day management of that centre. In addition, such large organisations also employ staff in policy, training and other management positions. The Pay Equity Inquiry has limited itself to examining staff employed directly in long day care centres and has not looked at those other employees in child care allied to long day child care centres.

Early-childhood teachers are typically found below managers and directors. Sometimes teachers also act as directors or co-ordinators, such as at KU Children's Services (Ex 38). Teachers who work in child care centres need to be distinguished from child care workers, so-called, as they are subject to different awards. Teachers are typically employed under the Teachers (Non-Government Early Childhood Service Centres other than Preschools) (State) Award or the Teachers (Non-Government Preschools) (State) Award (see Lady Gowrie Child Centre Ex 41, Blacktown Kindergarten Association Ex 48, Kanga's House Ex 52) but some larger organisations have negotiated their own enterprise award or agreement. Both KU Children's Services and Sydney Day Nursery are cases in point: see the Teacher (KU Children's Services)(State) Award and Sydney Day Nursery Enterprise Agreement with the NSW Independent Education Union (Ex 68). In contrast to the situation of teachers, child care workers - usually referred to as "Advanced Child Care Workers

(Qualified)" or "Child Care Workers" - are generally employed under the Miscellaneous Workers - Kindergartens and Child Care Centres &c (State) Award.

By far the largest number of employees in child care centres fall into the two classifications known as Advanced Child Care Worker (Qualified) and Child Care Worker. The term "qualified" refers to qualifications received through the TAFE system which have been, in chronological order, the Child Care Certificate ("CCC"), the Certificate of Child Care Studies ("CCCS") and the Associate Diploma in Social Science (Child Studies). Qualifications will be considered at length in a later section. There are a small number of Advanced Child Care Workers who are not qualified but they tend to be employees who have been working in child care for a large number of years. Child Care Workers can be both qualified or unqualified and the term denotes both lack of experience compared to and/or a lower level of responsibility than an Advanced Child Care Worker.

The distribution of employees in each classification varies from centre to centre. Minimum ratios of children to staff are set by the Regulations (see below under Regulatory Framework). Most importantly each centre must have a certain number of primary contact staff and teaching staff in proportion to the number of children at the centre. If there are any children at the centre under 2 years old there must be a qualified member of staff present and this employee is typically a holder of the Associate Diploma (reg 35 of the Regulations).

Indicative distributions can be gained by examining employees in each classification at the major organisations. At KU Children's Services there are the following numbers of employees in long day centres in each classification:

Manager	7
Director/Teacher	68
Advanced Child Care Worker (Qualified)	80
Advanced Child Care Worker	10
Child Care Worker	81
Nurse	5
Cook	19
Clerical	16
Total	<u>294</u>

(Ex 38)

At Sydney Day Nursery the figures are somewhat different.

Answers provided to the Inquiry in reply to a request for information from counsel assisting (Ex 29) indicate that a large number of teachers are employed in their child care centres and that many of them also perform the role of director of the centre. The following statistics were supplied by Sydney Day Nursery as to the number of employees in each classification:

Teacher (4 Years)	13
Teacher (3 Years)	38
Advanced Child Care Worker	52
Child Care Worker	124
Nurse	7
Cook	14
Administrative Assistant	17
Total	<u>265</u>

(Ex 68)

It is important to note that teachers, often with university qualifications in early childhood studies, are ranked above child care workers within the same organisation.

At smaller institutions the spread across the classifications is more even. At Kanga's House there are, below the Director, 3 teachers with university qualifications, 12 Advanced Child Care Workers (Qualified) and 3 Advanced Child Care Workers (training), 2 cooks and 2 administrative staff (Exs 51, 52). At Budgewoi and Bluehaven Jelli Beanz 3 Teacher/Directors are employed, one Teacher, 6 Advanced Child Care Workers, 10 Child Care Workers (training) and 3 support workers (Ex 42). The Uniting Church Engadine Long Day Care Centre employs one Director, one teacher, one Advanced Child Care Worker, 5 Child Care Workers (unqualified), 2 nurses, 2 cooks and one administrative assistant (Ex 43).

FUNDING OF THE CHILD CARE INDUSTRY

State and Commonwealth funding of the child care industry is complex depending on the type of facility and the type of grant. The Department of Community Services supplies funding for services which provided approximately 61,000 child care places as at April 1997. In 1996-97 the Department provided \$86 m in grants and subsidies to over 2,000 non-government child care services for the provision of those places (Ex 75).

The further information set out below is taken from two sources: "Planning to Succeed in Child Care", described by the Childcare Fee Subsidies Section of the Commonwealth Department of Health and Family Services as a standard package of information made available to prospective child care providers, providing information about many aspects of establishing a service including the Commonwealth assistance which is available, and "Instructions for child care services concerning implementation of policy changes on 27 April 1998" which sets out upcoming changes to Commonwealth assistance.

Commonwealth child care funding is divided between two principal programs - the Commonwealth Childcare Assistance Scheme and the Childcare Cash Rebate Scheme. Commonwealth child care expenditure nationally has grown steadily from \$250m in 1989-90 to a projected \$1.3b in 2000-01. The Commonwealth will increase child care places by 83,000 new child care places between 1997-98 and 2000-01. In the 1997-98 budget the Commonwealth announced that it would limit the number of new child care places to 7,000 places per year for 1998 and 1999 effective from 27 April 1998.

To participate in the Childcare Assistance Scheme, a long day child care centre must operate at least 8 hours per working day for 48 weeks per year, be a holder of the relevant State licence, register with the National Childcare Accreditation Council and participate in the Quality Improvement and Accreditation System (see *The Regulatory Framework* later). Assistance is available for parents if they apply to Centrelink which is responsible for calculating the amount of assistance. On advice from Centrelink the child care

provider then reduces the charged amount by the degree of assistance.

Assistance is means tested and reduces in proportion to increases in income. It also varies depending on the number of children and the number of hours of care used. The Childcare Rebate, on the other hand, is aimed at recompensing families for work related care expenses and is aimed at low and middle income earners. Current rebates (as at 20 February 1998) are a maximum of 30% of child care costs, or 20% for those on family incomes over \$70,000, up to a weekly ceiling (currently \$28.65 on a 30% rebate for one child). The Commonwealth also has a number of other assistance programs to families and child care centres, such as the Supplementary Services Program paid to centres for children with additional needs (for example, children with disabilities, indigenous children), and the Special Needs Subsidy Scheme paid to families with ongoing high support needs, such as those whose children have a disability or are refugees. Operational subsidies are no longer available to long day care centres.

CHANGING DEMAND

Demand for child care is affected by a number of factors. The number of child care places demanded in NSW is affected by structural changes in the workforce. The principal reason for increased demand for child care is the increased level of workforce participation by women which has grown continually and is forecast to continue doing so for the foreseeable future. In 1995, both parents worked in 60% of all families in Australia, compared to 1979 when the amount was 45%. EPAC estimates that there will be an 18% increase in demand

for child care for children under 11 in the next 15 years and a 15% increase for children under 5 (Economic Planning Advisory Commission *Future Child Care Provision in Australia: Task Force Final Report* 1996 quoted in Ex 57 at 27). In addition demands for child care are likely to be more diverse demanding greater flexibility, especially in terms of hours, from child care providers.

Government funding has a strong impact on the level of fees charged for the provision of child care services. Child care fees have, in turn, a strong impact on the demand for child care places. NSW Government funding has typically been in the nature of operational subsidies to child care providers, whereas Commonwealth funding has either been direct to child care providers as subsidies (the Child Care Assistance Program) or in terms of child care rebates paid to parents. Direct funding to child care providers has in the past been passed on to consumers by a reduction in the amount of fees charged. This, of course, has a flow on effect increasing demand for those places in a similar way to that as the provision of allowances to parents has done so. The extension of fee relief to parents in 1991 by the then Federal Government had a huge impact on the provisions of private child care places. The number of places in long day care increased in the period 1991 to 1996 by 313.8% (Department of Health and Family Services *Children's Services Fact Sheets* 1996 quoted in Ex 57 at 28). EPAC has estimated that an increase in government subsidies of 10% would translate into a 7% increase in demand for child care places (EPAC *Future Child Care Provisions in Australia* quoted in Ex 57 at 27).

Recent reductions in Commonwealth assistance and funding for child care has had a dampening effect on child care demand. Many of the submissions and witnesses to the Inquiry spoke of recent negative effects in their centres (Ex 43, 48, 68). The large reductions in Commonwealth funding contained in the 1996-97 budget, including the loss of operational subsidies, has led to fee increases in excess of increases in child care assistance (Ex 68). The Executive Officer of Sydney Day Nursery said that the loss of operational subsidies from the Commonwealth had a "dramatic impact on utilisation" as parents withdrew their children, gave up work or switched to lower cost care (Ex 68). Funding loss has meant that child care providers such as Blacktown Kindergarten Association have been forced to trim staff to child ratios (under the *Centre Based and Mobile Child Care Services Regulation (No 2) 1996*) closer to the regulated minimum. The loss in quality has maintained pressure on the service to increase fees in order to maintain previous quality (Ex 48). Blacktown Kindergarten Association stated that unemployment has affected affordability of fees and that means testing has also meant that fewer parents qualify for child care allowance (Ex 48).

A number of competitive pressures have also been noted above. Those are competition between the "for profit" and the "not for profit" sectors and, in addition, both those sectors against family day care and informal care. The most obvious effect being that, as fees increase, the comparatively unregulated and less professional services offered by family day care become more attractive to parents utilising child care.

THE REGULATORY FRAMEWORK

The child care industry is regulated by the *Children (Care and Protection) Act 1987* ("the Act") and, more specifically, the *Centre Based and Mobile Child Care Services Regulation (No 2) 1996* (most recently amended in May 1997 - "the Regulations") (Ex 35). The legislation provides a licensing scheme which applies to all centre-based care including long-day care centres, preschools, multipurpose centres, occasional child care services and mobile services. It does not apply to child-minding, babysitting or playgroups organised informally by parents (Regulatory Impact Statement at 97 and s4 of the Act). Licence conditions include compliance with a "Code of Conduct" and certain standards including child number and staffing ratios.

Section 31 of the Act provides that unlicensed persons are not to provide child care services. It is an offence for a licensee to have anyone other than the authorised supervisor with overall supervision of the child care service (s.31(2)). The specifications in a licence are set out at s.32.

The definition of "service" is found in reg 5 of the Regulations. It means a centre based child care service or a mobile child care service. A "centre based child care service" means a child care service provided at a fixed premises ... by a person for the purpose of educating, minding or caring for ... 4 or more children ... who are under the age of 6 years and who do not ordinarily attend school. A "mobile child care service" has much the same definition modified to relate to an itinerant child care service provided in more than one place. Application details and information needed to accompany an application

for a licence are set out at regs 8 and 9 and include such requirements as details of experience and training of the applicant, child care services previously operated and criminal convictions. An applicant must nominate a person as an authorised supervisor who will have the overall supervision of the service. An authorised supervisor must have completed a three year course in early childhood studies or hold an Associate Diploma of Social Science (Child Studies) or an equivalent qualification (reg 10). Applications for licences must be accompanied by a written statement and implementation plan setting out policies, practices and procedures (reg 12). Such matters must include staff participation in curriculum development, the way in which staff interact with children, the ways in which staff ensure programs are culturally relevant, training for staff and other matters such as health issues and abuse. The form of the licence is set out at reg 13 and the conditions of the licence at reg 15.

Child numbers and staffing standards fall within Part 5 of the Regulations. The maximum number of children who may be provided with child care services at any one centre is limited to 30 for children under 2 and 60 for children over 2, unless with Ministerial approval (reg 30). Regulation 33 prohibits an authorised supervisor from allowing a primary contact staff to both supervise children and perform other duties. ("Primary contact staff" are those employees who are actually involved in educating, minding or caring for children and does not include clerical staff or trainees: reg 5.) Regulation 34 sets primary contact staff to children ratios:

- (a) 1:5 for children under the age of 2 years;
- (b) 1:8 for children from 2 years old to under 3; and
- (c) 1:10 for children from 3 years old to under 6.

Regulation 35 requires that there are the following numbers of teaching staff available for the following prescribed numbers of children:

- (a) 30-39 children - 1;
- (b) 40-59 children - 2;
- (c) 60-79 children - 3; and
- (d) 80 or more children - 4.

For the purposes of reg 35, "teaching staff" means a primary contact staff member who has completed a university course of three years in early childhood studies or has other approved qualifications, training or experience. In addition, if a child of 2 years old or less is receiving child care services, there must be on the premises of the centre an enrolled nurse (mothercraft), a registered nurse or a person with a Certificate of Child Care Studies, an Associate Diploma of Social Science (Child Studies) or a child care certificate: sub-reg 35(2).

In addition to regulation by the State, the Commonwealth also operates its own regulatory scheme for centres seeking Commonwealth funding. A centre will only be granted funding if it has been accredited by the National Child Care Accreditation Council implementing the Quality Improvement and Accreditation System. The Accreditation System sets out 52 standards which must be met. The standards concern interactions between staff and children, staff and staff, staff and parents, program planning, nutrition, health and safety practices, centre management and staff development (Ex 57 at 17).

UNIONISATION AND INDUSTRIALISATION

The two principal unions in the section of child care industry examined by the Inquiry are the Australian Liquor, Hospitality and Miscellaneous Workers' Union (ALHMWU) and the Independent Education Union (IEU). Child care workers and many of the allied employees within child care centres are covered by the ALHMWU and fall under the Miscellaneous Workers - Kindergartens and Child Care Centres &c (State) Award. However, teachers who work in child care centres are not covered by the ALHMWU but rather by the IEU and fall under, in most cases, the Teachers (Non-government Early Childhood Services Centres Other Than Pre-Schools) (State) Award (Ex 57).

The child care industry has a low rate of union membership. Evidence received during the course of the Inquiry indicated that for the Sydney Metropolitan area there was only a maximum of 500 members in the ALHMWU from the child care industry.

Child Care workers have not utilised industrial action in order to achieve wage increases. The ALHMWU indicated to the Inquiry that this was likely to be caused by isolation of child care workers, especially in small community based child care centres and also by the close relationship established between the workers and parents. Isolation is exacerbated by the lack of nearby centres with fellow child care workers and the close proximity with employers in many centres. This close relationship between workers and parents should not be underestimated. Unlike many service industries child care employees have daily contact with not only the children but, more importantly,

the parents of those children. Industrial action is likely to have an immediate and personal effect on a child care worker. This is exacerbated because of the importance of the worker-parent relationship to the child care employees' performance of their jobs. The close working relationship between child care workers and parents has meant that workers have been conscious of the possibility of fee rises following any increase in wages or improvements in conditions (Ex 36).

All NSW awards in the child care industry for child care workers since 1969 have been by consent. The ALHMWU representative agreed that the Industrial Relations Commission had not been required to examine the work value of workers in the child care industry for 12 years, including during the Minimum Rates Adjustment process in 1990 following the new Federal awards (see also Ex 36). It should be noted that the hearing of the Federal award case in 1990 did not involve a work value assessment per se. I shall consider the Federal and New South Wales Minimum Rates Adjustment processes below.

Although the Miscellaneous Workers - Kindergartens and Child Care Centres &c (State) Award is classified as a minimum rates award this, effectively, is a misnomer. There are very few over-award payments in the industry and those that do exist tend to go either to senior members of child care providers such as directors of child care centres, or to employees in larger organisations who have been able to successfully negotiate such overaward payments (Ex 57 at 37). Ms Kelly estimated from her own survey that only 18.5% of child care centres paid over-award payments to child care workers.

The statistic rose to 24% if directors were included (Ex 57 at 35-36). Accordingly she concluded that more than 80% of child care centres paid the award rate to employees (Ex 57 at 36). The award is for child care workers, therefore, closer to a paid rates award than a minimum rates award (Ex 57 at 37).

Information provided to the Inquiry as a result of requests from counsel assisting (Ex 29) support the conclusions that in the vast majority of cases employers pay at the award rate or marginally above (Lady Gowrie Child Centre Ex 41, ROCK Ex 45, Blacktown Kindergarten Association Ex 48, Jelli Beanz Kindertartens Ex 42). Over-award payments are not paid at Sydney Day Nursery except for a 4% extra amount in superannuation (Ex 68). At the Uniting Church Engadine Long Day Care Centre the Director, but no-one else, is paid an over-award rate (Ex 43). KU Children's Service pays an award rate of pay based on its own award: KU Children's Services (Other Than Teachers)(State) Award (Ex 38). This is a higher rate than the Miscellaneous Workers - Kindertartens and Child Care Centres &c (State) Award. Kanga's House pays an extra \$10.00, \$20.00 or \$30.00 a week in recognition for 4, 5 or 6 years plus service respectively and has a number of other over award conditions such as study leave, extra sick days and clothing allowance (Ex 52).

It was also evident to the Inquiry that there was very little paid over-time available for workers in the industry. Work outside of hours was demanded by employers but was repaid, if at all, only through time-in-lieu (Exs 46, 51) or rostered days off (Ex 40). However, this was clearly out-of-hours work for which no compensation was provided by the employer. Work out of hours consisted of

mainly preparation time for developmental activities and staff meetings.

Evidence taken from employees at, for example, KU Children's Service, Sydney Day Nursery and Lady Gowrie indicated that overtime was rare and at many centres non-existent (Exs 40, 46, 51 and 53). This accords with Ms Kelly's findings (Ex 57 at 30).

Although there has been some enterprise bargaining activity in child care since its inception in NSW in 1991, enterprise bargaining activity has generally been low. Only 15 agreements were negotiated between 1991 and 1996 according to the Department of Industrial Relations (Ex 388), and only one of those, according to Ms Kelly, dealt comprehensively with wages and conditions (Ex 57 at 33). All of those agreements were non-union and they reflect a policy of the ALHMWU to pursue award-based increases and the development of a new classification system (Ex 57 at 33). Ms Kelly points out that this is in contrast to the IEU which has entered into "pattern bargaining" negotiations with employers. Teachers were able to negotiate an over-award payment of 5% from a limited number of child care centre employers but this was later absorbed into variations to the Teachers (Early Childhood Services Centres Other Than Pre-Schools) (State) Award (Ex 57 at 34).

Both the ALHMWU and the IEU have been able to negotiate separate awards with KU Children's Services: the KU Children's Services (Other Than Teachers) (State) Award and the Teachers (KU Children's Services) (State) Award (Ex 57 at 34).

WORK IN THE INDUSTRY

Essential Features of Child Care Work

The easiest way to understand what the essential features of work in the child care industry are is to firstly look at the award structure, as it provides a useful synopsis of the type of work performed in the industry. The classifications as found in the 1997 award variation of the Miscellaneous Workers: Kindergartens and Child Care Centres (State) Award are in hierarchical order:

Child Care Support Worker
 Child Care Support Worker (Qualified Cook)
 Child Care Worker
 Advanced Child Care Worker
 Advanced Child Care Worker: Qualified
 Co-ordinator
 Co-ordinator: Qualified

(Ex 34)

The core work in child care centres is provided by Child Care Workers and Advanced Child Care Workers, mainly qualified. The roles and responsibilities of each level in the foregoing hierarchy of classifications are set out at length in the Award (cl.8) but a summary is provided below:

Child Care Worker

A Child Care Worker is a carer appointed to contribute to and assist in the implementation of a child care program under the general direction

of a supervisor. A Child Care Worker is not necessarily qualified. She or he is expected to perform all or some of the following duties:

- positively interact with children, giving individual attention and comfort;
- assist to implement daily routines;
- assist to ensure a clean, safe and healthy environment for children;
- supervise activities of groups of children for short periods;
- assist in development and/or evaluation of the program;
- assist in the observation and evaluation of the children's development;
- communicate with parents as instructed;
- attend to incidental cleaning and housekeeping; and
- perform incidental administrative duties.

(Ex 34 Tab 58)

Advanced Child Care Worker: Qualified

An Advanced Child Care Worker: Qualified means a qualified carer who holds the Associate Diploma in Social Science (Child Studies) from TAFE or an equivalent qualification. She or he will have been appointed to develop, plan and implement the child care program. Such an employee is responsible to the overall employer of a service and may be responsible for the direction of other staff. Her or his duties may include:

- direct responsibility for the management of a group of children;
- ensure the maintenance of a safe and healthy work environment for staff and children;

- liaise with parents as to the needs of the children and the service;
- maintain records;
- ensure that programs with respect to each child are planned, implemented and evaluated;
- ensure that regulations, licensing requirements, service policies and procedures are observed; and
- carry out administrative duties for effective room management and child care responsibilities.

(Ex 34 Tab 58)

The remaining classifications can be understood in relation to Child Care Workers and Advanced Child Care Workers.

Child Care Support Worker

A Child Care Support Worker provides general assistance to the cook, and also in the areas of laundry, cleaning, driving, gardening and handy work where required.

Child Care Support Worker (Qualified Cook)

The classification is self explanatory and is generally restricted to those with basic qualifications in cooking.

Advanced Child Care Worker

This classification is exactly the same as for Advanced Child Care Worker: Qualified except that the worker need not be qualified. It is ranked

below its qualified counterpart.

Co-ordinator

A co-ordinator is appointed to co-ordinate, administer and manage a child care service and may also be called upon to perform the following duties:

- accountable to employer for administration of the service;
- co-ordinate and manage day-to-day operations of the service;
- manage staff;
- oversee implementation and maintenance of healthy, clean and safe environment;
- complete day-to-day administrative tasks including requirements for funding and licensing;
- ensure adherence to regulation and licensing requirements;
- liaise and consult with parents;
- liaise with management as to compliance with government funding requirements including funding submissions;
- assist with preparation of budgets;
- develop, implement and evaluate service policies and procedures;
- develop goals and directions for the service; and
- prepare and present reports.

Co-ordinator: Qualified

A Co-ordinator: Qualified performs exactly the same duties as a Co-ordinator save that she or he must be qualified by holding an Associate Diploma in Social Science (Child Studies) or equivalent. Qualification also

means that the person may act as a Supervisor at a centre in accordance with the *Children (Care and Protection) Act 1997*.

In addition to the above classifications one could expect to find a number of teachers qualified in early childhood studies at a child care centre and perhaps also one or more employees with nursing qualifications. Neither are covered by the Miscellaneous Workers: Kindergarten and Child Care Centres (State) Award and are not considered at length in this Inquiry.

UNRECOGNISED DUTIES, FUNCTIONS, SKILLS AND RESPONSIBILITIES

The job descriptions found in the award do not entirely disclose the nature of the work performed. Evidence received at the Inquiry, especially from those employed in child care centres, indicated that Advanced Child Care Workers in particular were required to take on additional duties to properly perform their jobs. Advanced Child Care Worker Sharon Hegner said that her additional duties performed after working hours include: participation in in-service training, staff meetings, researching for children with special needs, shopping, making of resources and programming and evaluation of children in her care (Ex 46) (similar evidence also being given by Ms Martirena and by Ms Konitsas). Ms Godhard of Sydney Day Nursery agreed that overtime is rarely paid. Advanced Child Care Worker Meropy Konitsas stated that she was required to provide particular and time intensive attention to children with special needs such as those with sight or hearing impairments, or those needing assistance with physical development (Ex 53).

Advanced Child Care Worker Christine Wedd stated that she is required to manage the health of children, including sick children and their medication, who are present at the centre. She must also be aware of child protection issues and must follow the reporting requirements under the *Children (Care and Protection) Act* (Ex 40) duties also referred to by Ms Hegner, and by Ms Martirena. Ms Konitsas stated that the child protection issues were hugely complex and needed to be dealt with both properly and sensitively. Such issues involved the interaction of both the regulations under the *Children (Care and Protection) Act 1986* and also the centre's policies and guidelines. Critical issues of confidentiality often arose for Advanced Child Care Workers. They would be called upon to make decisions about whether to refer the matter to the director of the centre and, where appropriate, to the responsible Government agencies including the police (Ex 53).

It was clear to the Inquiry that the straightforward nature of the way the work was described in the award belied the complexity and value of the work. Broadly speaking, the degree of out-of-hours work and the work associated with child development and assessment are more akin to professional duties.

Many of the witnesses remarked upon the specialised nature of report keeping and developmental work they were required to do as an Advanced Child Care Worker: Qualified. Such specialised work requires those workers to rely heavily on their professional skills for which they had received qualifications.

Gabriela Martirena testified that report keeping, programming and evaluation involved the full extent of her professional skills including assessment of cognitive development, self-help, language and motor skills. Ms Martirena also indicated that she was expected to undertake such activities as “play therapy” with children (a form of diversional therapy), manage behavioural difficulties with the child and the parents, manage children who do not speak English and seek to provide a non-culturally specific developmental regime (Ex 51). None of these activities were specifically covered in the award except in the most general way but were necessary for the proper performance of Ms Martirena’s job.

It was also clear that Advanced Child Care Workers (Qualified) are frequently, if not constantly, called upon to supervise other staff who are working with children. Often an Advanced Child Care Worker will be responsible for other staff members working in a particular room catering for children of a particular age group. That work may not be with any direct supervision by the centre director (Ex 53).

The above examples of skills not recognised in the award clearly indicate that there is an emphasis in the award on skills which are easily comparable. Skills such as planning and evaluation and the supervision of staff are relatively easy to identify. This is because such skills are apparent in those blue collar industries which have had decades of industrial examination and development. Industries such as child care (and this is true for many female dominated service industries although not all, with teaching being a relevant and related exception, because of the recognition of professional skills in that

occupation) have not been subject to the same work value scrutiny, and accordingly the recognition of skills in those industries is accordingly less developed.

In the child care industry it is trite to observe that the main work of a Child Care Worker or Advanced Child Care Worker is with other human beings - the children the subject of the care. Such workers must also interact with the parents and guardians of those children and, to a lesser extent, their fellow workers and other agencies.

Care needs to be taken in describing the skills of child care workers. For example, child care workers should not be aligned with shop assistants or waiters who have only a limited interpersonal interaction with people at their workplace. Comparisons based on domestic service, child minding or charitable work are at least anachronistic and at worst misinformed. Child care workers have an intensive relationship with the children they are responsible for, and are required to implement the early childhood development skills which they learn as part of their qualifications, and which are implemented with the direction of those qualified in early childhood learning. As I will discuss in relation to the history of the award covering this group, I have some doubt that the valuation of such workers (to the extent it has occurred at all) properly recognises the emergence of their professional or quasi professional skills. I will consider this further under the next heading concerning qualifications and under the section dealing with the history of the award.

QUALIFICATIONS IN THE CHILD CARE INDUSTRY

The main qualifications examined by the Pay Equity Inquiry concerned those gained at TAFE Colleges and held by Child Care Workers and Advanced Child Care Workers (Qualified) and many of their superiors. Teachers and those holding positions as co-ordinators or directors of child care centres generally have university qualifications, most often a Bachelor of Education in early childhood studies. The Inquiry concentrated on the qualifications held by child care workers, of whatever description, as they are the employees covered by the Miscellaneous Workers: Kindergarten and Child Care Centres (State) Award whereas teachers are covered by completely separate awards.

The qualifications held by child care workers have changed greatly since their introduction to TAFE in 1977. The history of qualifications are considered below under "Changes in Qualifications". Currently, TAFE operates the following courses in ascending order of complexity and recognition:

Qualification	AQF Level
Certificate II in Children's Services (Introduction to Working with Children 0-12 Years)	2
Certificate III in Children's Services (Traineeship)	3
Certificate III in Children's Services (Centre Based Care - Infants)	3
Certificate IV in Children's Services (Centre Based Care)	4
Diploma of Children's Services (Centre Based Care)	5

(Ex 62, Ex 69)

The above levels are equivalent to the Australian Qualifications Framework (AQF) levels set out at the right hand side of the above table. AQF standards were established in 1995 to standardise qualifications across all Australian TAFE and equivalent courses. The AQF replaced the Australian Standards Framework (ASF) which was a competency based framework for industry. The AQF includes both competencies and qualifications and accordingly makes the ASF superfluous. The AQF is still being developed and is not expected to grade all qualifications until 1999.

Each AQF level is described, or has a "descriptor", and where a course is at a particular level it is deemed to meet the descriptors specified for that level (Ex 62). There are only six AQF levels in the vocational sector. Both the Associate Diploma and the Diploma are rated AQF level 5 or ASF level 5 under the old nomenclature. Level 6, for which there does not exist a course in child care, is described as an "Advanced Diploma". The AQF levels recognise such indicators as outcomes based assessment, autonomy in the performance of work, unpredictability in work undertaken, initiative, planning, strategic decision making and responsibility for other staff.

A number of the witnesses appearing before the Inquiry in relation to qualifications in child care stated that the Associate Diploma or Diploma needed to be distinguished from the lesser qualification provided by AQF Level 3 certificates (Ex 62). Level 3 certificates are generally considered to be trade qualifications whether they are in child care or some other industry such as the

metals industry. Associate Diplomas and Diplomas provide an intermediate qualification between trade certificates and university level bachelor degrees. They, of course, have a strong vocational component.

The course structure set out in the table above was introduced for the first time in the 1998 academic year. It is important to note that the Diploma of Children's Services (Centre Based Care) replaced the old Associate Diploma of Social Science (Child Studies) which is the most commonly referred to qualification. Despite its name the Associate Diploma is equivalent to the current Diploma and both are at AQF Level 5 (Ex 65). The change in name reflects a change in nomenclature, not a major increase in the level of qualification. The Associate Diploma satisfies the requirement for qualification under rr 10 and 35 of the *Centre Based and Mobile Child Care Services Regulation (No 2) 1996* and it is anticipated that the Regulations will be amended to reflect the introduction of the new Diploma course.

DIPLOMA IN CHILDREN'S SERVICES

The Diploma in Children's Services (Centre Based Care), accredited in 1998, is a two year full-time course conducted at NSW TAFE Colleges. The course is designed to meet the needs of staff currently employed in centre based child care industry who are seeking to upgrade their skills (Ex 61). Later in 1998 it is expected to be complemented by two further Diplomas: Diploma in Children's Services (Out of School Hours Care) and the Diploma in Children's Services (Home Based Care - Field Worker/Care Provider) (Ex 54).

The Diploma follows on the heels of the Associate Diploma of Social Science (Child Studies) which was also a two year full-time course. Entry to the course requires completion of Year 12 at high school including English at the required level (Ex 65). The course lasts for 1506 hours over the two years and includes 427 hours “on-the-job” training or practicum. The course also allows for participants to exit early from the course with qualifications at the Certificate II, III or IV level if they wish. Because the course is at Diploma level it has an emphasis on administration, leadership skills and analytical problem solving (see generally Ex 61).

The Diploma course is subject to a number of standardisation regimes which are satisfied by the course. Imbedded into the curriculum are not only the National Child Care Core Curriculum but also the 1997 Child Care National Competency Standards and the AQF levels mentioned above. The latter two are required by the National Training Reform Agenda. Standardisation with the National Competencies and the AQF is one of the factors that distinguishes the Diploma from its predecessor. In addition, the course meets the National Child Care Industry Standards (see generally Ex 55). It is worth noting that the National Child Care Core Curriculum is divided between a child care traineeship at ASF/AQF level 3 and a child care diploma at ASF/AQF level 5 (Ex 115).

TAFE courses such as the Diploma course are accredited under delegation from the Vocational Education and Training Accreditation Board. They are also supported by the relevant Industry and Training Advisory Board

(ITAB) in this case, the Community Services and Health ITAB. Ultimate accreditation for courses is given by the Director-General on behalf of the Minister for Education after advice has been received from the Board of TAFE Studies. The accreditation process is, in turn, designed to meet the requirements of national registration of courses with the Australian Council on Tertiary Awards (Ex 65).

The Diploma course is also integrated into further tertiary study. Holders of the Associate Diploma (and, in the future, the Diploma) are able to gain 12 months advanced standing for all NSW universities offering early childhood degree courses. The University of New England offers two years advanced standing for the course (Ex 65). According to one witness many holders of the Associate Diploma take advantage of the advanced standing provisions to upgrade their qualifications so that they can also work in Department of School Education schools (Ex 65).

CHANGES IN QUALIFICATIONS, CHANGES IN WORK

Child care courses offered at TAFE have changed markedly since their initial accreditation in 1977. The major shift in courses offered, which is particularly relevant to the Pay Equity Inquiry, was in 1990 when the principal course offered through TAFE was changed from a certificate course to an associate diploma course. The question of whether this was an actual upgrading of the qualification or merely a change in nomenclature is considered after a discussion of the various courses offered.

The first child care TAFE course was the Child Care Certificate (CCC) accredited in 1977, although it was first offered at North Sydney TAFE in 1975. The course involved a total of 1872 hours over two years with 432 hours of practical work. It was aimed at those wishing to be child care centre workers with responsibility for children aged 0-8 years old. It was anticipated that the graduates would work with teachers in pre-schools and trained staff in kindergartens, full day and occasional care centres and residential centres (Ex 61).

In 1985 the CCC was replaced by the Certificate in Child Care Studies (CCCS). The CCCS was referred to as "para-professional". The CCCS expanded the coverage of the course to include children 0-12 years old and services such as family day care, refuges, cot rooms/infants/toddlers, hospital, crisis/emergency care and early intervention. The component of practical work was increased substantially to 120 days. The CCCS marked the change from child care workers working as assistants to other more comprehensively trained staff (such as teachers), and child care workers working independently (Ex 69). In addition, the Department of Community Services also granted graduates equivalency, for employment purposes, of a Mothercraft Nurse in recognition of the mothercraft module introduced after the discontinuation of the CCC (Ex 61).

The Associate Diploma of Social Science (Child Studies) was accredited in 1989 and offered as a course for the first time in 1990. The course was aimed at training its students to work independently and in teams with

children aged 0-12 years in a variety of children's services. Compared to the CCCS the Associate Diploma increased both autonomy and responsibility for qualified child care workers (Ex 69). The course was taught through both practical and theoretical components over a total of 1584 hours over two years. The practical component comprised over 372 hours. Some of the major changes included with the Associate Diploma were that the entry level was upgraded from Year 10 to Year 12 high school education. Also for the first time the Associate Diploma was given advanced standing in university courses in early childhood education. Those holding the CCCS were able to upgrade to the Associate Diploma by completing the last stage of the Associate Diploma course on integrated programming (Ex 61).

The Diploma course commencing in 1998 represents a further progression from the Associate Diploma. It includes as a matter of course the higher standards needed for entry to the Associate Diploma and also offers the advanced standing at NSW universities in early childhood studies. In addition to improvements such as the integration of standards found in the National Child Care Core Curriculum, National Competencies and ASF/AQF levels, the Diploma provides students with an opportunity to specialise. Apart from the core compulsory units students may specialise in centre based care, family day care, indirect and direct care and out of school hours care.

Witnesses appearing before the Pay Equity Inquiry remarked that the changes in TAFE courses offered were due to major changes over the period in the child care industry. Ms Killiby, the Program Manager, Child

Studies, Community Services, Health, Tourism and Hospitality Educational Services Division, Department of Education and Training (formerly NSW TAFE Commission) stated that “[t]he industry became more diverse, more complex, and more professional” (Ex 69 para 5).

The Associate Diploma course, for example, had been amended to incorporate the increased number of children under 3, the growth in long day care, resulting from an increased number of women in the workforce, the emphasis on “quality” care and its link to trained staff (Ex 61 and oral evidence of Ms Killiby). The Quality Improvement and Accreditation System mentioned earlier reflected the emphasis at a national level of increasing quality child care and standardising it nationally (Ex 69). Ms Killiby points out that courses changed to keep pace with industry changes.

Ms Kynaston, Executive Director of the County Children's Services Association stated “[training] is extremely important. I think it is a critical factor in the delivery of quality service.” She remarked on the increasing complexity in early childhood research and the community's expectation of child care workers. She said that the increasing complexity had been factored in to the Diploma and had been a feature of the development of TAFE courses for a period. There had been a progression in terms of the courses better reflecting the service provided. The courses met the needs of industry particularly in relation to child development and meeting community based needs.

A further important defining moment in the progressive improvement in child care qualification and its differentiation from early childhood studies came with the Associate Diploma. The curriculum for the Associate Diploma was no longer solely based on child development and care in the early childhood field, but also on workplace competencies and skill progression within the Australian Standards Framework. Influence on course content moved away from mainly educationally based experts to those with industrial experience (see particularly Ex 69).

Ms Godhard is the Executive Officer of the Sydney Day Nursery and Nursery Schools Association. She had formerly been a Manager, Education and Care of KU Children's Services.

Ms Godhard considered that the expectations placed upon child care workers had changed over time. There was a development of a body of knowledge beyond mere child learning and child playing activities. There has been an increased emphasis upon nutrition and health safety. There is a changed emphasis on cultural diversity and working with disabilities. There has been a greater emphasis on the development of programmes for intellectual and social development and these are reflected in accreditation in the industry. Significantly, Ms Godhard considered that the development of qualified staff increased the quality of care in child care services.

There was some debate before the Inquiry as to whether the level of qualification offered by the Associate Diploma course had accordingly been

raised to ASF/AQF level 5 from ASF/AQF level 3. Ms Wendy Lindgren, for example, was of the opinion that,

... when you looked at the old Child Care Certificate and you looked at the next Certificate in Child Care Studies and you looked at the Associate Diploma, they were very similar. In fact the first one should have been named an Associate Diploma rather than a certificate. We have always felt that the title 'certificate' did not indicate the true level of the course.

The Employers' Federation/Chamber submitted that the Associate Diploma and the diploma course for Child Care Studies was at approximately the same level and provided the same level of information, knowledge and skills as the former Child Care Certificate and Certificate in Child Care Studies. They relied upon the evidence of Ms Lindgren at various points in order to support this proposition. They also relied upon the evidence of Ms Godhard.

As I have earlier noted the evidence of Ms Godhard does not support this contention. However, I consider that, properly understood, neither does the evidence of Ms Lindgren. The extract that I have set out above does not indicate a view that Ms Lindgren considers the Associate Diploma course to be essentially at the level of the Child Care Certificate but rather the opposite, namely, that proper evaluation and assessment of the course at its introduction would have placed Child Care Studies at an Associate Diploma level even at that earlier time. In essence, the reason for the lower classification at the earlier time was because there was a considerable degree of difficulty in establishing a child care course and the pragmatic response was to fix a course at the

certificate level.

I also consider that Ms Lindgren did recognise changes had occurred since the introduction of the certificate course. For example, she recognised that the courses had been redesigned, particularly in relation to the diploma course, which was now based on the National Child Care Competencies. The diploma course was now recognised as a course providing advanced standing at least one year at Universities. Furthermore, the entry requirements for child care studies changed so that the entry level went from Year 10 to Year 12 (Higher School Certificate). One of the most significant changes recognised by Ms Lindgren was the requirement for more recent research to be recognised in the course and the need to adjust the training from pedagogy to competency based training. Furthermore, there were changes in health requirements and child abuse requirements.

I consider that the foregoing evidence demonstrates two fundamental aspects about qualifications and training in the child care industry:

1. There have been significant changes in the industry which have been recognised in the changes made to child care courses and qualifications; and
2. the industry has now developed to a point where the diploma course is recognised as giving advanced standing for university.

Whilst the Associate Diploma of Social Science Child Studies course was accredited in 1989, it is likely that the true qualifications for child care workers have reached that level or that stage at an earlier date than that. The Child Care Certificate course was accredited in 1977 and it is likely that, whilst the Certificate in Child Studies course was accredited in 1985, the child care workers had reached an Associate Diploma level of training by that time or shortly thereafter.

In short, the child care industry has seen major changes over the last 30 years in the type of work conducted, in the demand for its services and in the training and professionalism of its employees. The child care workers described by *Manuel CC* in 1969 (Ex 206) worked with little or no training and in what was an industry dominated by charities and characterised as mainly charitable.

The training of child care workers has grown remarkably since 1975 so that now child care workers can be seen as at least para-professionals if not professionals. Increased regulation in the area has cemented the role of properly trained child care workers in the industry. The National Child Care Curriculum and the National Competencies linked in with the AQF have helped standardise the qualifications nationally and have assisted in integrating child care courses with further tertiary study. Consistently rising demand and increased State and Federal funding, at least to date, has assisted in changing the focus of the industry, from mainly charitable, to a fully-fledged service