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WAGE DRIFT IN THE AUSTRALIAN METAL INDUSTRIES[1]

In Australia, the wage or earnings drift problem is concerned with the difference in the rate of change of earnings and award rates.[2] It is of special interest, under the prevailing system of wage determination, because it provides the basis for assessing the success or otherwise of the wage policy formulated in particular by the Commonwealth Arbitration Commission. For in so far as the Commission attempts to base its award increases on national capacity to pay (in which anticipated productivity is the critical element), a disproportionate increase in earnings could lead to two difficulties: first, a rise in the general price level beyond the limits of economic and social desirability;[3] and second, an "unjust" wage structure as between those on award rates and those who earn more than award rates.

The Components of the Drift

The components of the difference between earnings and award rates may be classified as follows:

(a) Overtime earnings based on a minimum of 1½ times standard rates.

(b) The effects of changes in the occupational and industrial composition of the work force such that an increased proportion of workers are in the higher wage brackets.

(c) The effects of changes in the proportion of female and junior workers who tend to be in the lower wage brackets than adult male workers.[4]

[1] This is part of a paper submitted to the Vernon Committee of Economic Enquiry in January 1964. I am indebted to the Australian Metal Industries Association for making available to me the results of their Surveys of Earnings. My thanks are due also to Professor K. J. Hancock for reading an earlier draft of the paper and making helpful suggestions. I am, of course, alone responsible for what appears here.

[2] In countries where collective bargaining is on an industry or national basis, the divergence is between earnings resulting from informal arrangements between individual employers and workers and the rates of pay formally determined under the collective bargaining agreement. Where collective bargaining is on a company basis, as is widely the case in America, the wage drift problem disappears.

[3] Although price stability is often advanced as the appropriate aim of wage policy, there may be occasions (for example, with rising export prices and incomes) when a desirable distribution of income could be achieved through a rise in the price level induced by a general wage increase.

[4] This element of drift is eliminated in the Australian statistics by the device of computing Average Earnings per Adult Male Unit figures.

(d) The effects of payment-by-results methods which, beyond a certain point, link earnings directly to measured performance.
(e) The effects of rates of wages being paid in excess of award prescriptions, commonly referred to as overaward payments.

The drift associated with the first four elements should cause no concern: it is likely to be associated to a greater or lesser degree with increased productivity and, therefore, need not increase costs or prices per unit of output. For example, overtime leads to higher earnings but it also leads to greater productivity. An increased proportion of skilled workers leads to larger earnings but, again, this may be expected to be accompanied by a higher productivity. But in so far as these four elements of drift plus award wages are in total geared to productivity increases, any overaward pay would lead to an increase in unit costs and possibly also to a rise in the price level beyond desirable limits. It is for this reason that strictly only the last category of drift, overaward pay, could be in conflict with wage policy. Of course, in practice these other elements of drift, (a) to (d), may to varying degrees be contrived: overtime may be fictitious; workers may be deliberately overclassified into more skilled categories; and payment-by-results systems may not be truly based on performance. In so far as they can be distinguished, these contrived elements are more properly classified under the overaward payment category (e).

The Reasons for Drift

Why does drift take place? The classifications set out above provide part of the answer. Overtime arises from a shortage of labour or a shortage of capital capacity to employ more labour during standard working hours; or, in the case of maintenance workers in certain industries, from the technical requirements of doing maintenance work outside normal working hours. The use of more skilled workers and less female and junior workers could result from technical developments or from variations in the level of employment. For example, a decline in the level of activity tends to result in a larger contraction of employment of unskilled workers than of skilled workers. The use of payment-by-results systems administered as a means of increasing incentive for better performance could lead to a reduction in unit costs despite increased earnings. But the category (e), overaward payments, including the contrived elements of the other categories, is more difficult to explain and little is known about it. Yet, this could be a critical element in a successful wage policy in Australia.

Does overaward pay arise because of a general shortage of labour? Does it arise because of a shortage of particular types of labour which, in accordance with "equitable" requirements, must be spread to other workers who are not in short supply? Does it arise because certain firms or industries, for reasons of productivity and/or monopolistic power, find it expedient to pay more than award prescriptions; and in so doing force others to these higher standards? What part does trade

union pressure play? To what extent does the operation of genuine payment-by-results schemes force equivalent increases in the wages of those working in the same plants but not directly under such schemes —with a consequential spread to their counterparts in other areas of employment? What part do award increases play in overaward payments? Do they reduce overaward payments, do they leave overaward payments unchanged, or do they immediately or in time lead to a rise in overaward amounts? Are these alternative results influenced by the size of award increases; that is, do large award payments lead to a decline or an increase in the size of overaward payments? Or is the size of award increases a neutral factor in the movement of overaward payments?

Questions of these kinds are pertinent to a sensible view of the scope of wage policy. But while it is easy to ask these questions it is quite another thing to try to answer them, particularly as the factors involved in the size and course of overaward payments are likely to be combined in a complex and varying manner over time. Yet if the task of unravelling the mystery of overaward payments is to be attempted, something must be done to assess, however imperfectly, the practical relevance of the factors which on *a priori* grounds could be said to play a part in overaward payments. For this purpose, statistical analysis is a necessary first step.

The Measurement of the Drift

Unfortunately, however, official statistics, particularly those before 1960, do not take us very far beyond comparing movements in the indexes of earnings and award rates compounded for a large and heterogeneous area of employment. Overtime earnings,[5] the effects on average earnings of occupational and industrial changes in the composition of the work force, and payment-by-results earnings are not separable from other earnings. The result is the crudest possible measurement of the wage drift by comparing in percentage terms the percentage change in the Earnings Index with the percentage change in the Minimum Wage Rate Index. Thus, if these two indexes rose by 5 per cent and 2 per cent respectively, the wage drift for the period would be

$$\frac{105}{102} \cdot 100 - 100 = 2{\cdot}9 \text{ per cent.}$$

If what we want to assess is the movement of overaward elements in earnings, this measure of wage drift, which we shall refer to as the Gross Wage Drift (GWD), could be misleading.[6] For a positive or a negative GWD could arise simply because of changes in overtime worked, and need not have any bearing on the overaward element.

By eliminating changes in overtime, adjusting for occupational, industrial and sex changes in the composition of the work force—if

[5] Before 1960.

[6] See K. J. Hancock's reservations in "Wages Policy and Price Stability in Australia, 1953-60", *Economic Journal*, Vol. LXX, Sept. 1960, pp. 548-9.

such information were all available—we might derive a measure which we may call the Net Wage Drift (NWD). This gives a truer assessment of the variations in the overaward pay. But the important question of whether and under what circumstances award increases are absorbed by overaward payments would not be answered unambiguously by the NWD.[7] The ideal procedure would be to examine the *values* of overaward pay of particular industries and particular occupations directly and to consider the size and movement of such overaward payments.

The Metal Industries Surveys

The opportunity to analyse the Surveys carried out by the Australian Metal Industries Association (1955-60) presents us with hopeful prospects of learning a little more about the drift in an important Australian industry. This industry is generally believed to be one of the leading areas of overaward payments, its growing productive capacity along with aggressive unionism providing a suitable environment for drift. And although it should not be regarded as representative of industry in general, we may reasonably suppose that this industry sets the pace and pattern in wage movements for most wage earners.[8] However, despite these and other limitations, interpreted with due caution, the Surveys provide useful information hitherto not widely known and add significantly to our understanding of the wage drift problem in one sector of industry.

Size of Overaward Payments

Table I shows the size of overward pay for each of the five States and the average of these States for the period 1955-60.[9] The greater

[7] This point is sufficiently important to warrant some elaboration. Representing earnings (excluding overtime and adjusting for work force structural changes) by E and award rates by R, $E-R$ is the amount of overaward pay. So long as $E>R$, the addition of a given award increase, r, to both E and R would affect E proportionately less than R.

Thus $$\frac{E+r}{E} < \frac{R+r}{R}$$

Therefore, despite the absence of any absorption of the overaward amount, a negative NWD is registered; and the larger the r, the greater would be the negative NWD. Indeed, an *increase* in overaward payment, denoted by w, would be required to produce a zero NWD.

Thus $$\frac{E+r+w}{E} = \frac{R+r}{R}$$

The greater the gap between E and R, the larger would w have to be to avoid the appearance of a negative NWD. Thus even the NWD would not necessarily throw enough light on the *absolute* movement of overaward payments although, clearly, the NWD is a far more reliable measure than the GWD. (See Figures 1-3).

[8] Relevant details of the Surveys are noted in the Appendix at the end of this article.

[9] For the five States, the All Male Average of Overaward Pay as a proportion of Award Pay in 1960 was 11·9 per cent. This may be compared with a figure of 10·1 per cent for Engineering, Metal Works etc. obtained by the Commonwealth Statistician in his Survey of Wage Rates and Earnings in September 1960. (See *Labour Report*, 1960, p. 74.)

importance of overaward pay, both in absolute terms and as a percentage of award pay, particularly in New South Wales and Victoria, is emphasized. These figures are very likely to understate the size of overaward payments. It is known that to varying extent employers may overclassify certain workers as a device for increasing wages. This form of overaward pay is not revealed by the Surveys.

TABLE I

Metal Industries Overaward Payments (Average 1955-60)
Adult Males

Adjusted to a 40-hour week basis

(Shillings)	Overaward Amounts (shillings)	Overaward Amounts as percentage of Award Payments
New South Wales	44·2	13·4
Victoria	38·8	12·0
South Australia	28·1	8·7
Queensland	16·1	5·2
Western Australia	11·4	3·3
Five States	36·7	11·2

Source: Metal Industries Surveys

NOTE: State figures weighted in proportion to the numbers of different categories as recorded in returns. The Five States figure was weighted in each year by the Commonwealth Statistician figures for average employment in the metal trades in the five States.
The overaward amounts are probably slightly overstated because of the method of adjustment used to bring the figures up to a 40-hour week basis for 1955-57. But other factors tend to understate these amounts. See Appendix.
The adjustment to a 40-hour week basis is made because ordinary time worked falls short of a 40-hour week on account of absenteeism, leave, uncompleted weeks, etc.

Table II looks at the different grades of skill. It will be seen that although there is wide dispersion in the value of overaward pay, as a percentage of award pay, overaward amounts are nearly all concentrated between 10 per cent and 13 per cent for the average of the five States and between 11 per cent and 14 per cent for New South Wales. It is interesting to note that the unskilled and semi-skilled workers receive overaward amounts not far short and in some cases greater than the skilled workers. As a proportion of award pay the unskilled have larger overaward pay than most skilled grades. But the outstandingly high overaward portion of Unskilled Foundry Labourers is probably due to an insufficient weighting of the unpleasant requirements of foundry work in award rates. Attraction money out of proportion to other occupations appears to be necessary to offset these apparently inadequate award rates.

Female Process Workers' overaward pay falls slightly short of that enjoyed by male process workers.

Increases in Total Earnings and Overaward Pay

Table III shows how the average annual percentage increases in Total Earnings are divided between award, overtime and overaward

TABLE II

Metal Industries Overaward Payments in Shillings and as Percentage of Award Payments (Average 1955-60)

Adjusted to a 40-hour week basis

	ALL STATES		NEW SOUTH WALES	
	shillings	%	shillings	%
Toolmakers	45·1	12·5	54·1	14·5
Fitters, etc.*	35·7	10·3	43·3	12·1
Sheetmetal Workers, 1st Class	35·0	10·2	38·2	11·0
Boilermakers	40·3	11·4	48·3	13·6
Moulders (Jobbing)	38·3	11·1	50·1	14·2
Machinists, 2nd Class	28·8	11·3	37·8	11·6
Process Workers	37·9	13·2	46·0	15·1
Foundry Labourers—Assistants	37·4	12·6	48·2	16·0
Foundry Labourers—Unskilled	47·9	17·1	56·4	20·5
Unskilled Labourers	33·1	12·3	40·2	14·4
All Male Average (Weighted)†	36·6	11·2	44·2	13·4
Female Process Workers	29·1	13·6	32·7	14·4

Source: Metal Industries Surveys

* This category should be understood to cover mechanical and electrical fitters, turners and 1st class machinists.

† In proportion to numbers of different categories recorded in returns.

TABLE III

Metal Industries Increases in Total Earnings and their Component Parts

(1955-60 Percentage Annual Increases)

	FIVE STATES				NEW SOUTH WALES			
	Total* Earnings	Award Payments	Overtime Payments	Overaward Payments	Total* Earnings	Award Payments	Overtime Payments	Overaward Payments
Toolmakers	5·2	2·8	1·4	0·9	5·3	2·6	1·7	1·1
Fitters, etc.	4·6	3·0	0·9	0·7	4·9	2·9	1·2	0·9
Sheetmetal Workers, 1st Class	4·9	3·1	1·3	0·4	5·8	3·1	2·0	0·8
Boilermakers	4·3	3·0	0·6	0·8	5·3	2·7	1·8	0·9
Moulders (Jobbing)	4·4	3·1	0·9	0·3	5·4	3·3	1·2	0·9
Machinists, 2nd Class	4·1	3·1	0·6	0·5	4·7	3·3	0·6	0·7
Process Workers	4·3	2·9	0·8	0·6	4·9	2·9	1·2	0·8
Foundry Labourers—Assistants	4·5	3·1	0·9	0·5	5·1	2·6	1·5	0·9
Foundry Labourers—Unskilled	4·2	2·9	1·4	−0·1	5·5	2·6	2·0	0·9
Unskilled Labourers	4·5	2·5	1·6	0·4	4·3	2·3	1·6	0·4
All Male Average (Weighted)†	4·6	3·0	1·0	0·6	5·0	2·9	1·3	0·9

Source: Metal Industries Surveys

* Components do not add up exactly because of rounding.

† In proportion to numbers of different categories recorded in returns.

pay. The figures for the different grades of skill show clearly the uniform importance of award increases as the major component of total earnings increases. In the five States average for all male workers, about two-thirds of the average earnings increase per annum is made up of award increases. There is greater variation as between the different grades in overtime as a factor in the earnings increase, but on the average just over one-fifth of this increase is due to overtime. This leaves about one-eighth of the increase in earnings attributable to overaward pay increases.

The picture in New South Wales is a little different, in that the increases in average earnings for the period were generally greater than for the average of the five States and in that overaward pay took a higher proportion (nearly one-fifth) of the average annual increase in total earnings.

The contribution of overaward pay to the rate of increase of earnings deserves emphasis. However, it is clear from these figures that award increases and overtime make up the bulk of the increase in earnings in this period, even if some allowance is made for the practice of over-classification as a factor tending to understate overaward pay. How far overaward payments contributed indirectly to the rate of award increases cannot be inferred from these Surveys. But it may be supposed that the emphasis given to overaward payments by the unions in the 1959 and 1963 margins cases may have been one of the more important factors influencing the Commonwealth Arbitration Commission in determining the size of their awards.

Gross Wage Drift and Net Wage Drift

The distinction between these two measures was made earlier. The weakness of the GWD as a measure of the movement of overaward pay was stressed; and caution was urged even in the use of the NWD as a measure. We may now examine these measures in connection with the Surveys, partly to learn about their size and movement but also to emphasize their limited use.

Table IV presents the GWD and NWD expressed as averages of the annual rates for 1955-60 for the different occupations[10] in five States and in New South Wales. The differences between the GWDs and NWDs of the different occupations arise from variation in overtime worked. The All Male Average GWD[11] is significantly larger than

[10] The availability of the numbers covered in these occupations each year has made it possible to weight each award rate by the numbers being paid this rate in order to derive the weighted All Male Worker Average. A comparison of the All Male Average Earnings with the All Male Average Award Rates, therefore, excludes the element of drift arising from a changing proportion of the different occupational categories. The difference between the GWD and NWD of these Surveys is due entirely to overtime earnings.

[11] As a matter of interest, it may be noted that the GWD for all industries based on the Commonwealth Statistician's figures (Average Earnings and Minimum Wage Rates Index) for the September Quarters of 1955-60 was 0·9 per cent for Australia and 1·2 per cent for New South Wales. These are fairly close to the figures for the All Male Average shown in Table IV and provide added confidence in the representative character of the Surveys.

the NWD, emphasizing the need to eliminate overtime from the drift in order to get any appreciation of the part played by overaward pay. So far as the NWD is concerned, all that we may surmise from Table IV is that it is on the average not a formidable factor and that it might be prudent not to exaggerate the part of overaward payments in the average annual increase of some 5 per cent in earnings per worker.

However, an examination year by year of both the GWD and NWD is more illuminating. This is done in Table V for five States and in Table VI for New South Wales. Two points deserve emphasis. First, both GWD and NWD fluctuate considerably from year to year. Second, there is no consistent relationship between the GWDs and their corresponding NWDs in each year: positive GWDs are associated with both positive and negative NWDs, large and small; and negative GWDs are associated with both positive and negative NWDs. In only 28 of the 55 cases recorded in Table V were positive GWDs associated with positive NWDs and negative GWDs associated with negative NWDs. The frequency of these associations was a little higher for New South Wales (Table VI)—32 out of 55 cases recorded. If any further emphasis were needed, this evidence again shows that because of overtime variations the GWD should not be used as a guide for overaward movements.

Can any light be thrown on the reasons for the fluctuations in GWD? Our period is too short for any confident answers on this question; but for what it is worth, comparisons may be made with annual changes in award rates as shown by the Minimum Wage Rate Index[12] and in the state of demand for labour as expressed by Excess Demand.[13] In Table V the All Male Average GWDs in five States are compared with annual changes in Minimum Wage Rates. It will be seen that,whereas the high Minimum Wage Rate increases in 1956 and 1957 are associated with negative GWDs, similar sized increases in 1959 and 1960 are associated with positive GWDs. If the Minimum Wage Rate changes are taken as representative of all the grades, the same conclusion would apply to the GWDs of these grades for those years.

[12] The average for the June and September quarters are compared year by year. The case for making a lagged comparison with the GWD (which is for the first week of September) is to allow sufficient time to elapse for award changes to affect overaward pay, but also to allow for the fact that award adjustments are usually in the period March-September.

[13] The figures used are Commonwealth Employment Service Registered Unemployed and Vacancies. It may be that the Commonwealth Employment Service is not widely used either by the unemployed skilled workers seeking work or by employers seeking to fill vacancies. However, since we are here concerned with changes in the state of the labour market from one period to the next, the Commonwealth Employment Service figures, particularly for the industry as a whole, will serve our purpose satisfactorily. It could be argued that the Vacancies figures are more appropriate as a measure of the state of demand for various categories of workers and, therefore, as the more probable factor inducing overaward payment. However, over this period, the results of the exercise are almost identical whether Unemployment, Vacancies or Excess Demand changes are used.
As in the case of comparisons with Minimum Wage Rate changes, the Excess Demand figures are for the average of the six months preceding September to allow sufficient time to elapse for the state of the labour market to affect the wage drift.

TABLE IV

Metal Industries Gross and Net Wage Drift
Annual Average 1955-60

Award Payments adjusted to a 40-hour week basis

	FIVE STATES		NEW SOUTH WALES	
	GWD %	NWD %	GWD %	NWD %
Toolmakers	1·4	0·7	1·7	0·9
Fitters, etc.	1·0	0·4	1·1	0·5
Sheetmetal Workers, 1st Class	1·1	−0·1	2·2	0·5
Boilermakers	0·6	0·5	3·0	0·6
Moulders (Jobbing)	0·6	0·0	1·3	0·4
Machinists, 2nd Class	0·7	0·2	0·9	0·4
Process Workers	0·6	0·2	1·4	0·3
Foundry Labourers—Assistants	0·5	0·1	1·9	0·6
Foundry Labourers—Unskilled	1·2	−0·5	2·4	−0·2
Unskilled Labourers	1·8	0·2	1·7	0·3
All Male Average (Weighted)*	0·8	0·3	1·5	0·5

Source: Metal Industries Surveys

$$\text{GWD} = \text{Gross Wage Drift} = \frac{\%\text{ change in Award Payments}}{\%\text{ change in Average Earnings}} \cdot 100\% - 100\%$$

$$\text{NWD} = \text{Net Wage Drift} = \frac{\%\text{ change in (Average Earnings} - \text{Overtime Earnings)}}{\%\text{ change in Award Payments}} \cdot 100\% - 100\%$$

* In proportion to numbers of different categories recorded in returns.

TABLE V

FIVE STATES—Metal Industries Gross Wage Drift, Net Wage Drift, Minimum Weekly Wage Rates (Percentage Increases), Excess Demand, Overtime Earnings and Overtime Worked

		1956		1957		1958		1959		1960	
		GWD	NWD	GWD	NWD	GWD	NWD	GWD	NWD	GWD	NWD
Toolmakers		0·0	1·6	−0·5	0·0	2·5	0·8	1·4	0·8	3·5	0·3
Fitters, etc.		−2·5	1·3	−0·7	−0·5	2·5	0·9	1·6	−0·7	4·0	1·2
Sheetmetal Workers, 1st Class		−2·6	0·4	−2·5	−0·9	3·4	1·1	1·6	−1·0	5·4	−0·2
Boilermakers		−5·1	0·5	−1·4	0·2	−0·5	2·3	2·2	−1·8	7·6	1·2
Moulders (Jobbing)		−5·4	−0·2	−1·6	0·0	1·7	0·0	2·6	−0·6	5·7	1·0
Machinists, 2nd Class		−2·9	0·3	−1·7	−0·8	1·4	0·9	1·7	−0·5	4·9	1·0
Process Workers		−0·6	0·4	−1·5	−0·2	3·5	1·3	0·7	−0·7	1·1	0·3
Foundry Labourers—Assistants		−5·0	1·7	−0·8	−1·8	−5·4	1·2	9·7	0·4	4·1	−0·9
Foundry Labourers—Unskilled		−1·4	−1·4	1·3	−2·3	−0·2	3·1	−0·4	−2·7	7·1	0·2
Unskilled Labourers		−0·2	0·0	−0·4	−0·6	1·8	1·3	−3·3	−3·2	11·1	3·1
All Male Average (Weighted)*		−3·2	0·8	−0·6	−0·3	2·4	1·0	1·4	−0·5	4·2	0·7
Minimum Weekly Wage Rates†		4·7		3·1		1·5		3·8		4·9	
	1955										
Excess Demand‡ in '000s	11·8	−1·2		−9·8		−13·1		−10·5		13·7	
Weighted Average Overtime Earnings in Shillings (Male Workers)	62·6	49·3		48·7		51·7		63·2		84·7	
Weighted Average Overtime Manhours Worked	5·1	3·9		3·6		3·9		4·6		5·6	

Sources: Metal Industries Surveys; Commonwealth Statistician, "Minimum Weekly Wage Rates"; Dept. of Labour & National Service.

* In proportion to numbers of different categories recorded in returns.

† Percentage Increases June/Sept. Quarters in Engineering, Metal Works, etc.

‡ CES Registered Vacancies less Registered Unemployed.

The picture in New South Wales (Table VI) is almost identical. We are tempted to conclude that in this period the GWD appears to be independent of the size of award rate changes. The same conclusion may be extended to the NWD.

TABLE VI

NEW SOUTH WALES—Metal Industries Gross Wage Drift, Net Wage Drift, Minimum Weekly Wage Rates (Percentage Increases), Excess Demand, Overtime Earnings and Overtime Worked

		1956		1957		1958		1959		1960	
		GWD	NWD	GWD	NWD	GWD	NWD	GWD	NWD	GWD	NWD
Toolmakers		−0·1	2·0	1·6	1·9	1·3	−1·1	2·3	0·9	3·6	0·7
Fitters, etc.		−4·0	0·1	0·1	0·7	0·5	0·3	3·7	−0·1	5·4	1·6
Sheetmetal Workers, 1st Class		0·4	2·0	−3·0	0·0	4·5	0·1	−1·0	−0·9	10·3	1·1
Boilermakers		−5·7	0·0	0·1	0·5	−3·6	0·3	5·9	0·2	12·8	1·9
Moulders (Jobbing)		−2·0	1·3	−3·8	−0·3	1·7	0·5	4·6	−0·7	6·1	1·2
Machinists, 2nd Class		−2·6	0·3	−1·2	0·1	−0·3	0·0	4·3	0·0	4·1	1·8
Process Workers		−0·3	3·0	0·4	−0·9	1·7	−1·0	4·8	0·2	0·4	0·0
Foundry Labourers—Assistants		−1·8	3·2	−2·6	−2·8	1·2	2·5	7·8	1·8	4·7	−1·6
Foundry Labourers—Unskilled		0·2	1·3	3·0	−2·1	−3·4	2·9	−1·5	0·1	13·7	−3·3
Unskilled Labourers		−2·5	−0·1	3·0	2·3	2·8	−0·5	−1·6	−1·5	6·6	1·3
All Male Average (Weighted)*		−2·2	1·4	−0·2	−0·1	1·5	0·3	3·6	0·1	4·8	1·0
Minimum Weekly Wage Rates†		4·4		2·8		1·2		4·3		5·0	
	1955										
Excess Demand‡ in '000s	5·1	0·8		−2·0		−2·5		−2·3		1·3	
Weighted Average Overtime Earnings in Shillings (Male Workers)	66·0	51·9		52·1		55·3		62·4		96·3	
Weighted Average Overtime Manhours Worked	5·2	4·0		3·8		4·1		5·2		6·5	

Sources: Metal Industries Survey; Commonwealth Statistician, "Minimum Weekly Wage Rates"; Dept. of Labour & National Service.

* In proportion to numbers of different categories recorded in returns.
† Percentage Increases June/Sept. Quarters in Engineering, Metal Works, etc.
‡ CES Registered Vacancies less Registered Unemployed.

A comparison of GWD and changes in Excess Demand is made by recording the number of times in which increases in Excess Demand are associated with a positive GWD and decreases in Excess Demand are associated with a negative or zero GWD. This is done for a number of grades of labour for which Excess Demand for labour figures are available (Table VII). The frequency of consistent association is marked for the five States (29/35) but less so for New South Wales (23/35).

The likely explanation for this association is the importance of overtime as a factor in meeting changes in the shortage of labour. Variations in GWD seem to occur primarily because of changes in overtime requirements, overtime providing the reservoir of labour to be tapped to a greater or lesser extent depending on the state of demand. This is brought out at the bottom of Tables V and VI where changes in overtime earnings and overtime worked may be compared with variations in Excess Demand.

TABLE VII

Frequency of Association of Changes in Excess Demand with Gross Wage Drift and Net Wage Drift

(Increase in Excess Demand with positive GWD or NWD; decrease in Excess Demand with negative or zero GWD or NWD.)

	FIVE STATES		NEW SOUTH WALES	
	GWD	NWD	GWD	NWD
All Male Average	4/5	2/5	4/5	3/5
Toolmakers	5/5	4/5	2/5	2/5
Fitters	4/5	2/5	4/5	1/5
Boilermakers	5/5	1/5	4/5	3/5
Moulders	4/5	4/5	4/5	2/5
Process Workers	4/5	2/5	3/5	3/5
Unskilled Labourers	3/5	3/5	2/5	3/5
TOTAL	29/35	18/35	23/35	17/35

Source: Metal Industries Surveys

Our examination of the GWD and NWD leads to the following conclusions:

1. The GWD is on the average larger than the NWD.
2. GWDs and NWDs fluctuate from year to year but there is no consistent relationship between the movements of GWDs and their corresponding NWDs. This emphasizes the danger of using the GWD as an approximation of the NWD.
3. The movements in GWDs are not associated in any consistent way with changes in the rate of increase of Minimum Wage Rates.
4. The GWD appears to be associated with changes in Excess Demand such that generally positive GWDs occur with increases in Excess Demand and negative GWDs with decreases in Excess Demand. The most likely explanation for this is the relationship between changes in Excess Demand and overtime worked.
5. The NWD does not appear to be associated in any consistent way with changes in either Minimum Wage Rates or Excess Demand.

Overaward Payments from Year to Year

If we were restricted to information about the GWD and the NWD only, we might well be forced to conclude at this stage that the story of overaward payments is still shrouded in mystery. All we could say is that as the best indicator of overaward pay, the average NWD for the period was fairly small. Whether overaward payments are ever absorbed by award increases, or whether their pace slows down with increased unemployment or with award increases, are questions which we are not able to answer by looking at GWD or NWD.

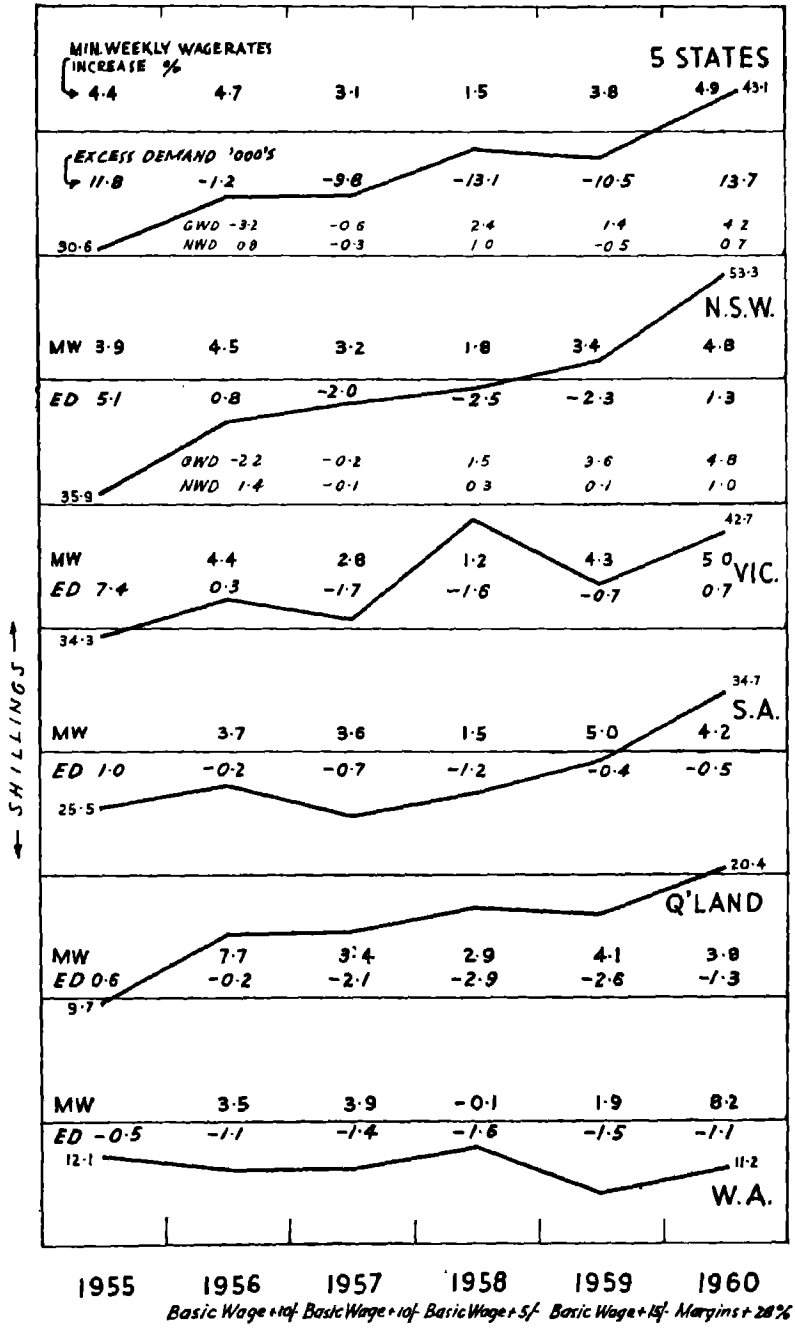


FIGURE 1. *Overaward Pay in the Metal Industries*

Fortunately, however, we are able to examine the overaward amounts directly rather than infer their movements from either the GWD or the NWD. Figure 1 shows the course of overaward pay (in shillings) between 1955 and 1960. Some allowance should be made for slightly inflated[14] figures between 1955-57 and, as a consequence, an understatement of the rise from 1957 to 1958.

The course of overaward pay in New South Wales begins with an initial jump (1955 to 1956), followed by three years (1957 to 1959) of creeping rise, with another jump in 1960. The increases in the Minimum Wage Rate Index are shown along the graph. It is difficult to make out any consistent association between overaward pay increases and rates of change in Minimum Rates other than, perhaps, that the large overaward pay increases were associated with the higher Minimum Wage Rates increases. More interesting is the association of negative Excess Demand with the slowing down of overaward pay. May we say that overaward pay does not appear to have been absorbed at any stage in New South Wales; that it has kept on rising; and that the pace of its increase has been associated with the level of economic activity in this industry?

By way of comparison, it is interesting to recall (Tables V and VI) that overtime earnings and overtime hours worked respond freely in *both* directions to changes in the level of economic activity. This means that the full impact of reduced economic activity falls on overtime earnings rather than award rates or overaward pay. A revival of economic activity, on the other hand, seems to raise both overtime and overaward pay.

Looking at the different grades of occupations which make up the All Male Average (Figure 2), this account of the course of overaward pay would not apply in every case. Foundry Labourers overaward pay seems to have been absorbed in 1957 (increasing unemployment) and 1960 (decreasing unemployment). On the other hand, Unskilled Labourers overaward pay rises in 1957 and thereafter, for two years of continuing increase in unemployment, slight absorption occurs. But these workers aside, the general picture in New South Wales is of overaward pay not being absorbed but rising to varying degrees with, in many cases, a big jump in 1960. This last year was not only a year of rapid recovery in employment but also one of large increase in award rates. In so far as overaward pay is tied directly or indirectly to award rates through payment-by-results systems, both the increase in award rates and demand for labour may have stimulated the rise in overaward pay. For New South Wales the rise in overaward pay in 1959 and 1960 in most occupations is clearly brought out in Table VIII which compares the increase in actual pay on a 40-hour week basis with the 15/- increase in the Federal basic wage in June 1959 and the 28 per cent increase in margins later in the same year. Absorption in overaward pay occurred in only a few cases.

[14] See Appendix.

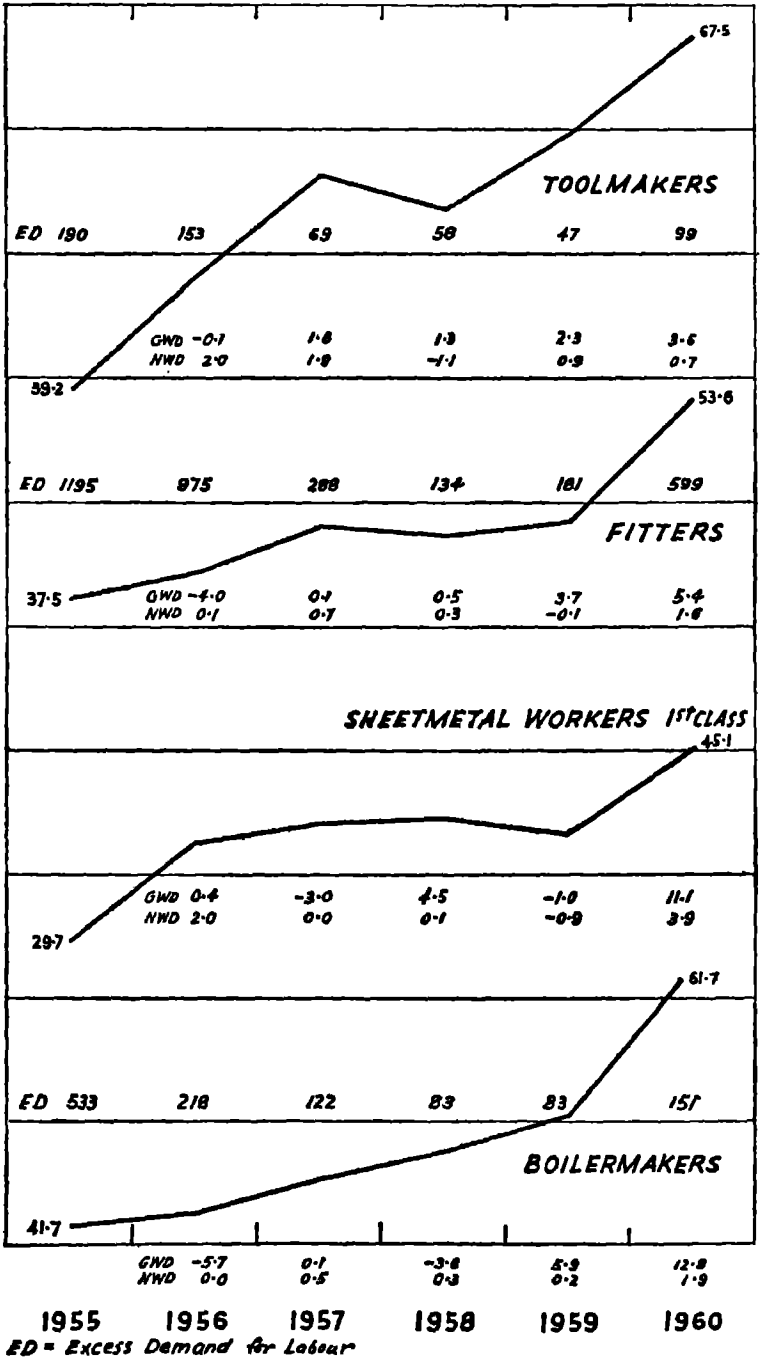


FIGURE 2. *Overaward Pay in the Metal Industries: N.S.W.*

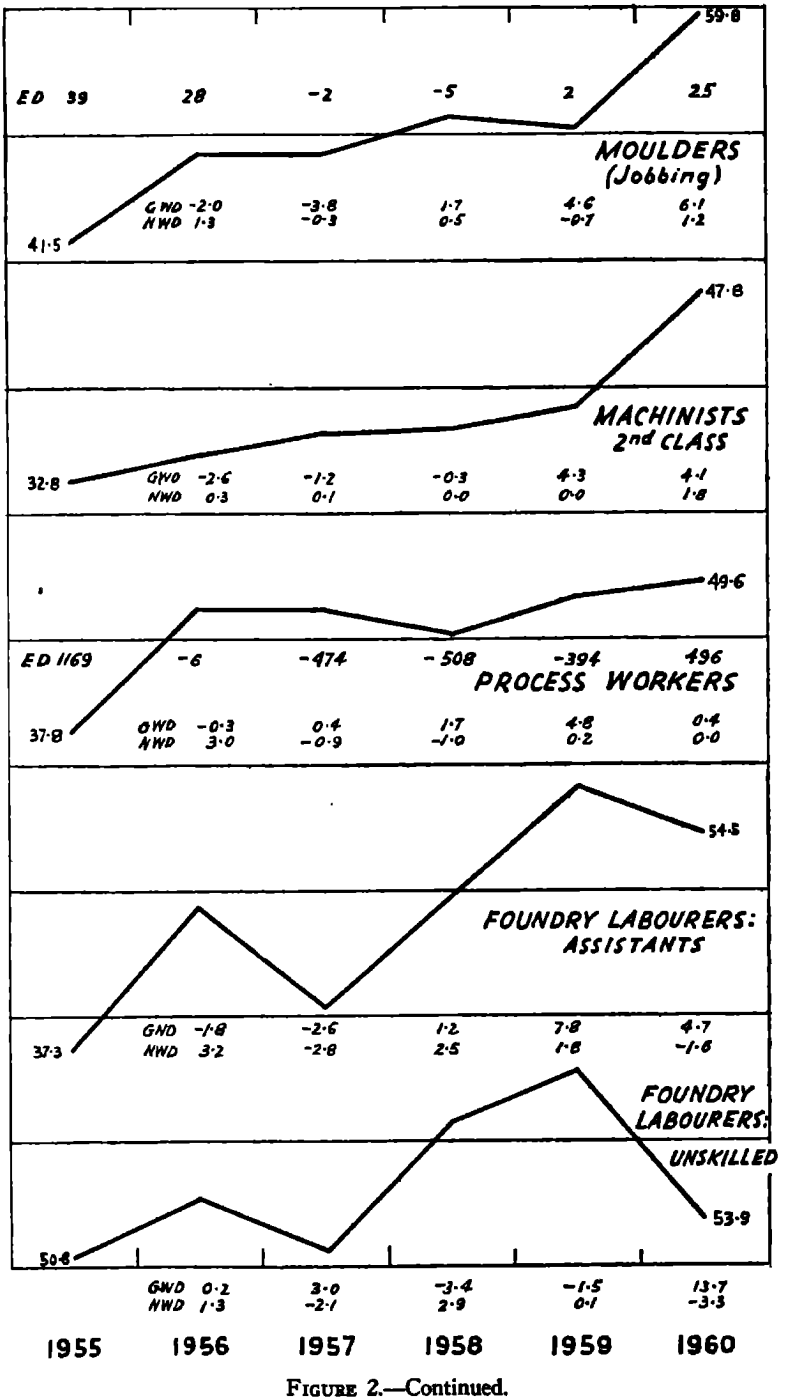


FIGURE 2.—Continued.

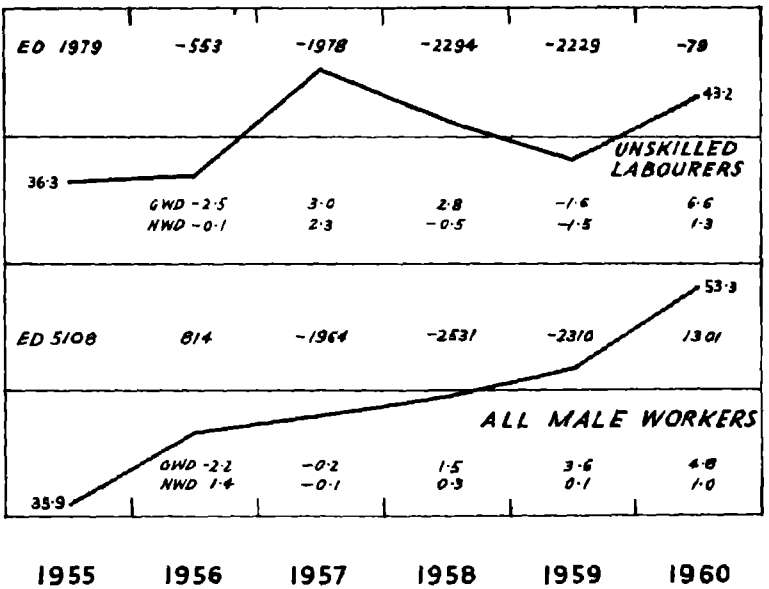


FIGURE 2.—Continued.

TABLE VIII

NEW SOUTH WALES—Metal Industries Increase in Average Earnings (Ordinary Time) Compared to 1958-59 Basic Wage Increase (15/-) and 1959-60 Margins Increase (28%)

	Increase in Ordinary Time Earnings Adjusted to a 40-hour Week Basis		Increase in Award Margins based on 28% formula 1959–60
	1958–59 *Shillings*	1959–60 *Shillings*	*Shillings*
Toolmakers	21·0	33·7	25·0
Fitters, etc.	15·6	32·1	21·0
Sheetmetal Workers, 1st Class	12·6	26·9	21·0
Boilermakers	16·9	30·6	21·0
Moulders (Jobbing)	11·7	39·3	21·0
Machinists, 2nd Class	16·9	27·0	14·0
Process Workers	17·4	8·8	6·0
Foundry Labourers—Assistants	21·7	9·0	8·0
Foundry Labourers—Unskilled	19·9	−6·7	4·0
Unskilled Labourers	10·8	9·4	2·5
All Male Average (Weighted)*	17·3	23·7	15·8
Female Process Workers	8·6	6·4	4·5

Source: Metal Industries Surveys

* In proportion to numbers of different categories recorded in returns.

Turning to the other States (Figure 1), Queensland presents roughly the same picture as New South Wales; and apart from some absorption with increased unemployment in 1957, the course of overaward pay in South Australia also resembles that in New South Wales. The movement in Western Australia seems to be a little stagnant, with a slight rise in 1958 (allowing for the adjustment bias referred to) and a dip in 1959. Victoria, however, seems to have had a distinctively different history.[15] The big rise in 1958, followed by a fall in 1959, is a little difficult to explain. Could it be that the comparatively small increase in award rates in 1958 (at a time when, ahead of other States, unemployment was already falling) was made up by a rise in overaward pay; and with the larger increase in award rates in 1959, some absorption took place? Or was this largely due to the relatively greater reduction in the Victorian sample in 1958 which makes this year less comparable with other years? On the information available, we have no reason to prefer one explanation to the other.

The five States graph is dominated by New South Wales and Victoria, the latter imparting something of the character of its 1958 and 1959 pattern to the five States graphs. This is also brought out in the occupational graphs (Figure 3).

Finally, it is interesting to examine the percentage of overaward pay to award wages (excluding overtime) from year to year. This is shown in the following figures:

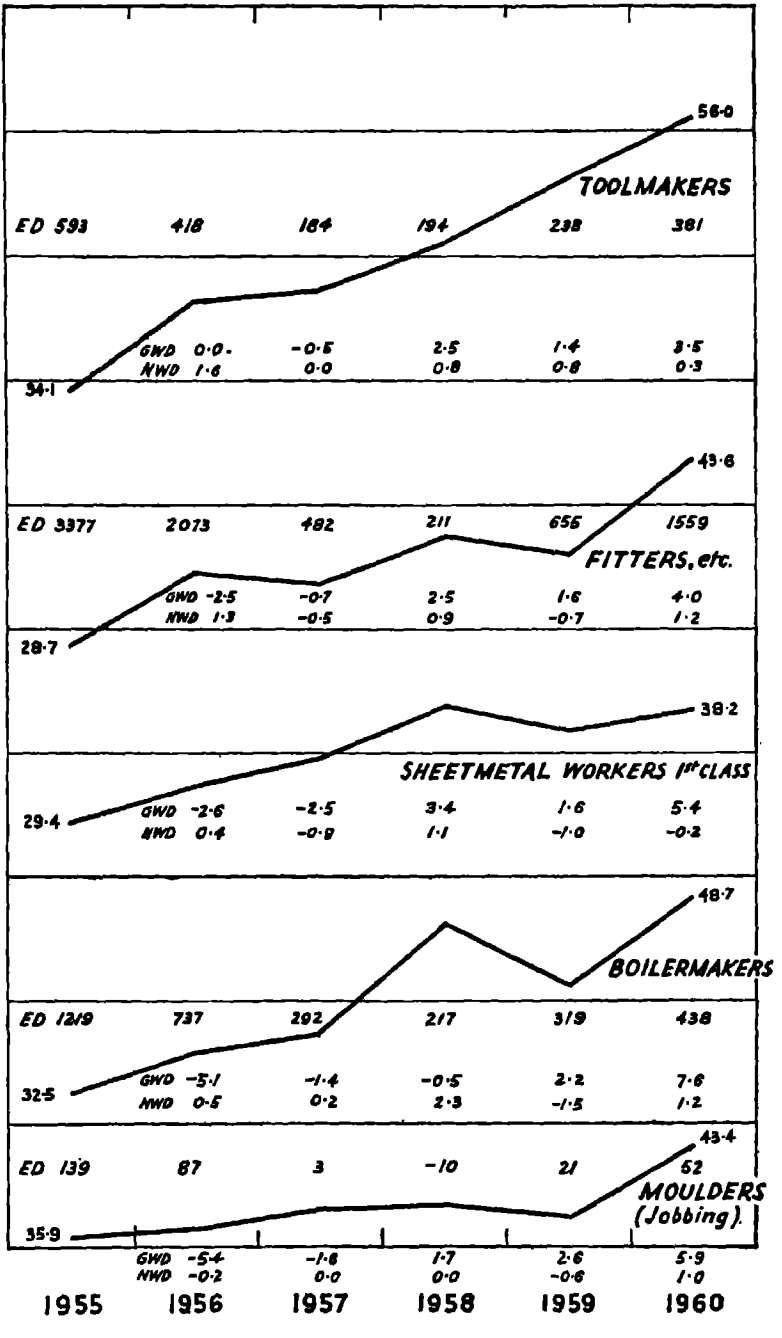
	1955	1956	1957	1958	1959	1960	1955-60 Average
	%	%	%	%	%	%	%
N.S.W.	11·7	13·2	13·1	13·4	13·5	14·7	13·4
Five States	10·2	11·7	10·7	11·8	11·9	11·1	11·2

It will be seen that by 1960 the percentage for N.S.W. was slightly higher than the average figure for the period, but in five States it was virtually unchanged. It would be reasonable to conclude, as a generalization, that the rate of increase in overaward pay has kept pace with the rate of increase in award wages. However, we may speculate on whether the rate of increase in overaward pay would have been significantly greater if the unemployment rate had been lower during 1957-59.

Conclusions on the 1955-60 Surveys

The information derived in the previous section takes us a little further than the analysis of GWD and NWD in our knowledge about overaward payments. Although the picture is not as clear as we would wish it to be and our period is too short for any confident generalizations, the following tentative conclusions, applicable especially to New South Wales, may be made in decreasing order of confidence:

[15] This pattern is generally reflected in the different grades.



ED = Excess Demand for Labour

FIGURE 3. *Overaward Pay in the Metal Industries: Five States.*

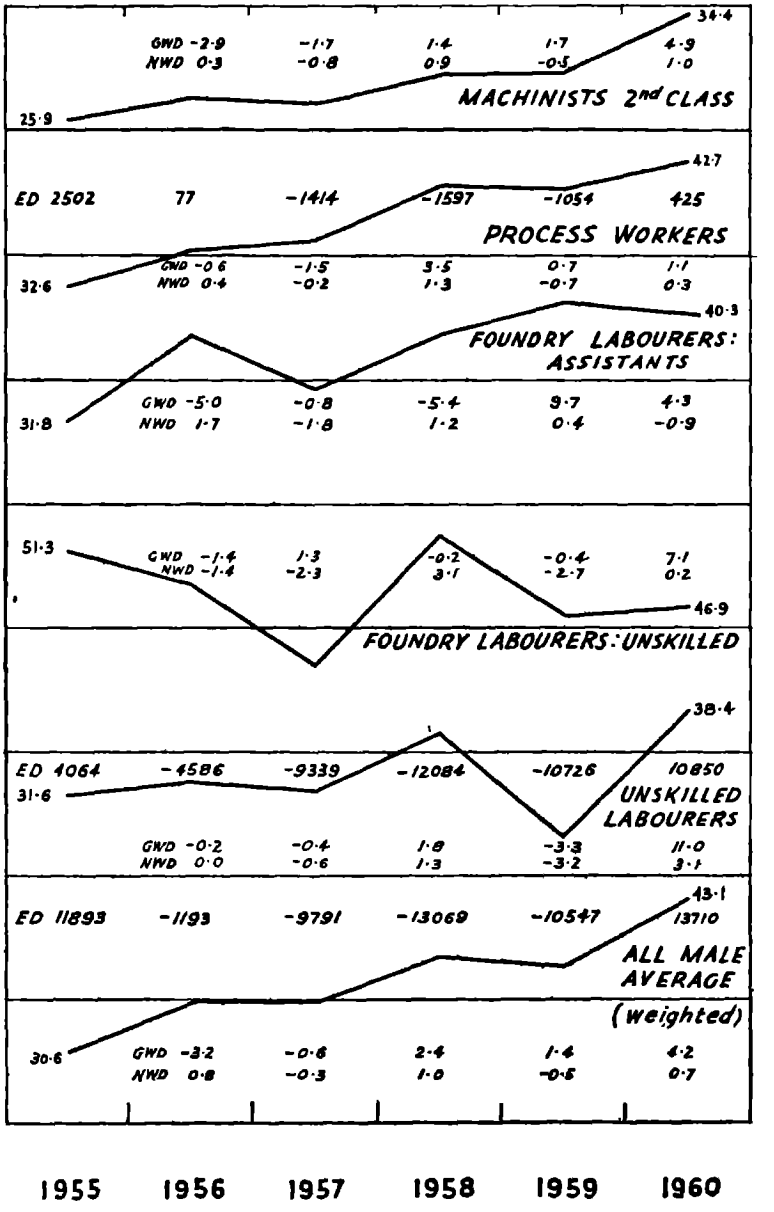


FIGURE 3.—Continued.

1. Average overaward pay as a percentage of award pay for 1955-60 is in the region of 11 per cent for the five States and 13 per cent for New South Wales. The figures for 1960 are only slightly higher than these averages and we may conclude that overaward pay has risen by about the same percentage as award wages in the period.
2. The increases in earnings between 1955 and 1960 are dominated by award and overtime pay increases. Overaward pay takes on the average only about one-eighth of the increase in earnings in the five States, and nearly one-fifth in New South Wales. The contribution of overaward pay to the pace of annual earnings increase is, on the average for the period, 0·6 per cent in the five States and 0·9 per cent in New South Wales. For years of large overaward pay, however, the contribution of overaward pay to the rate of increase of earnings is significantly greater. For example, in 1959-60 it was 1·1 per cent in five States and 1·4 per cent in New South Wales.
3. Overaward pay is, on the whole, not absorbed by award increases. The full impact of economic recession seems to fall on overtime rather than overaward pay.
4. Overaward pay has tended to drift upward over time, accelerating in periods of high activity.
5. The effect of the size of award increases on the increase in overaward pay is not brought out clearly by the figures. The linkage between award increases and earnings under payment-by results constitutes an automatic device for transmitting award increases directly and indirectly to overaward pay. But it is not possible to establish with any confidence the importance of this effect from the Surveys.

It is interesting to notice, however, that using the Commonwealth Statistician's figures for Average Earnings (Manufacturing) and Minimum Wage Rates (Manufacturing) and the Department of Labour and National Service figures for overtime in manufacturing, we derive for September 1961 an annual NWD[16] of 0·8 per cent and for September 1962 an NWD of 0·2 per cent. Manufacturing Minimum Wage Rates (June-September) rose by 2·7 per cent between 1960 and 1961 and by 1·2 per cent between 1961 and 1962. The first period was one of rising unemployment and, although unemployment fell in the second period, the recovery in economic activity was only partial and unemployment remained well above the pre-recession level.[17] Could we infer from this and from whatever meagre infor-

[16] Uncorrected for changes in the composition of the work force which, on the assumption that a larger proportion of the less skilled become unemployed in a recession, would tend to understate the NWD. The adjustment for overtime was done by multiplying overtime by 1½ and deriving percentage change in hours worked from Sept. to Sept. For 1961, the increase in Average Earnings corrected for overtime was 4·6 per cent and for Minimum Wage Rates 3·8 per cent. The corresponding figures for 1962 were 0·2 per cent and 0·0 per cent.

[17] See Keith Hancock, 'The Australian Economy', *Economic Record*, Vol. 39, March 1963.

mation the Surveys provide[18] that, within a certain range, the rate of increase of award wages affects the amount of overaward pay increase and that this impact is modified by the level of activity? Thus a large (small) increase in award rates in a period of high economic activity may be expected to stimulate a large (small) increase in overaward pay. Whereas a large (small) increase in award rates in a period of reduced or declining economic activity may be expected to lead to a small (negligible) increase in overaward pay.

The evidence for such a conclusion is by no means clear but at least for New South Wales there is a suggestion that this conclusion may apply.

This conclusion is, of course, compatible with the view that large increases in award wages may produce a large but *less* than proportionate increase in overaward pay and, thus, a small NWD. And conversely, a small increase in award wages may produce a small but *more* than proportionate increase in overaward pay and so a large NWD.

The Results of a More Recent Survey[19]

During August-October 1963, the Australian Metal Industries Association undertook a survey by personal interview in Melbourne and Sydney, covering 86 firms in the former and 109 in the latter. The firms were selected at random in a number of areas in the two cities. Part of the object of this survey was to find out why overaward payments were made and what effect increases in award rates (more specifically the 1961 Federal basic wage increase and the 1963 margins increase) have had on overaward pay.

In answer to the question "Why do you pay more than award rates?", the typical reply was "We wouldn't be able to hold our labour if we didn't". When asked to elaborate, respondents generally argued that a shortage of labour made it necessary to pay "market rates". However, the meaning given to "market rates" fell into two main categories: one implied the *prevailing* rates for certain types of labour, i.e. what other employers in the area are paying; the other implied the rates of pay necessary to attract a sufficient labour supply, i.e. paying more than other employers in the area.

It is interesting to note that only a small proportion blamed overaward pay and the rise in "market rates" on trade union pressure. The level of economic activity appears to be the main determinant of rising rates of overaward pay. Difficulties in recruitment and increased labour turnover rather than union pressure provide the occasion for reviewing the adequacy of wages. It could, of course, be that union pressure operates in certain key establishments, raising rates there and thus providing the basis for a generally higher market rate. However,

[18] For example, 1955-56 and 1959-60 were years of large award increases (over 4 per cent) and relatively large overaward rises. In both cases the level of activity was high and rising.

[19] The writer assisted in framing the questionnaire and took part in many of the interviews.

the impression obtained was that, wherever union pressure was used, it was to level up wages among firms which lagged behind industry generally rather than to set the pace for a higher standard.

If a labour shortage in a period of high economic activity is the mainspring of rising overaward pay, does a recession in activity and unemployment lead to a reduction in overaward pay? This question was posed in the context of an increase in award rates at a time of reduced economic activity. Employers were asked what the effect on overaward pay was of the 1961 basic wage increase. Did overaward pay stay unchanged? Was it increased? Was it reduced? In nearly all cases, overaward pay was not reduced by the award increase. In about one-sixth of cases, overaward pay actually rose following the rise in award rates. These were mainly cases where payment-by-results or other incentive pay prevailed and where such pay was automatically linked to award rates and usually also applied to workers on time rates.

Thus the increase in the basic wage in the circumstances of unemployment and declining economic activity of 1961 did not in general result in a decline in overaward pay. The behaviour of overaward pay with respect to the 1963 increase in margins awarded in a period of expanding economic activity was not very different. However, the upsurge of demand and the development of labour shortage here and there tended to increase overaward pay before and since the award of higher margins.

The suggestion contained in the 1955-60 Surveys of the existence of a ratchet resisting a fall in overaward pay despite adverse economic conditions appears to be fully confirmed by the recent inquiry. Employers were asked to reconcile their willingness, on the one hand, to pay overaward amounts and indeed to increase such amounts in periods of labour shortage; and, on the other, their apparent unwillingness to reduce such payments in a period of increased unemployment, especially when the award itself is increased in such a period. Their answers ranged from "We don't want trouble on our hands. Look what happened to the firms who tried to absorb overaward payments!", to "It's only fair. We would be breaking faith with our employees if we reduced the overaward element just because of some unemployment or because award increases have taken place." There appears, therefore, to be a general acceptance among employers that to reduce overaward pay when the level of activity falls or when award increases take place would be either unwise or improper or both.

Implications for Wage Policy

One of the objects of wage policy is to help to distribute increased productivity to wage earners without causing prices to rise, or at least to keep any rise within economically and socially desirable limits. It is generally believed that this object can be achieved by keeping the rise in money wage earnings somewhere close to the rate of productivity increase. However, the persistence of a wage drift complicates the

problem because, while the movement of award rates can be controlled, the wage drift operating through overaward pay is much more difficult to restrain.

Assuming that the generalizations made above in connection with overaward payments in the metal industries are applicable to the rest of the economy and that the level of economic activity is maintained at a higher level than prevailed during 1955-60, we may safely assume that the level of overaward pay will continue to rise. So long as the rate of increase in overaward pay is not greater than the increase in award wages and the latter is in step with productivity, average earnings will rise proportionately to productivity; and we may suppose that a stable price level will be maintained.

The Surveys analysed above have shown that award and overaward wages rose at about the same rate between 1955-60 and that the bulk of the increase in earnings may be attributed to award increases. The important part played by tribunals in the general level of earnings must be stressed. But it would be wrong to infer from this that the influence of overaward pay on earnings and prices may be neglected. Two points should be remembered.

First, in part of this period—in particular 1957-59—unemployment was running at a higher level than most people would have liked. We have noted the virtual stability of overaward pay during this phase. If instead the level of unemployment had been lower and the prosperity of 1956 maintained right through, the pace of overaward pay as well as its share of earnings might well have been greater.

Second, we should not assume an absence of any relationship between award and overaward wage movements. In particular, it is reasonable to believe that the Arbitration Commission has been influenced directly by the movement in overaward pay in its determination of award increases and indirectly by any price increases; and these may have resulted, partly at least, from such increases in overaward pay. Moreover, to complicate the picture it is by no means clear that the relationship between award and overaward pay movements is only in one direction. It could also be that the size of award increases influences the size of overaward pay such that large award increases lead to large increases in overaward pay. We have seen that, under circumstances of high activity, something of this relationship was gleaned in the Survey statistics. Thus, given this sort of interaction between award and overaward wages, it is not too fanciful to believe that, with continued high employment, increases in overaward payments will be conducive to higher award increases than might have prevailed with stable overaward pay. Such an "excessive" increase in awards could have cumulative effects: overaward pay is further increased; costs and prices are raised; the rise in the cost of living influences the determination of the next award increase, leading to another round of "excess" wages; and so on.

If this is a fair translation of the writing on the wall, what should be done about it? It is tempting to argue that if increases in award

rates are kept small then the pace of increases in the whole chain-reaction would also be reduced. We have noted from the Surveys the importance of awards in the movement of wage earnings. To illustrate from another source of statistics, between 1955-56 and 1959-60 the Minimum Wage Rate Index rose at an average annual rate of 3·6 per cent for All Industries and also for the Engineering, Metals etc. group. In this period the annual average rise in the Consumer Price Index was 3 per cent; and although by international standards this may be regarded as a fairly good record, we may suppose that a smaller increase in award pay, say at the rate of 2 per cent per annum, would have given us something very close to price stability—assuming that the productivity increase would not have been affected by a lower rate of money wage increases and that profit rates would not have risen.

However, to point out that smaller award increases would probably have given us a more stable price level is not necessarily to condemn the decisions of the Commission. There is a strong case for arguing that the existence of overaward pay enjoyed by some and not by others makes it necessary for the Commission to *try* to keep award rates not too far out of line with what the market is paying—even if the chances of actually succeeding in doing this are small. Notions of "wage justice" are so well entrenched in the labour market that the Commission, concerned not only with price stability but also with industrial relations, must take account of the magnitude and incidence of overaward payments even if to do so involves the risk of price increases.

If we could be sure that keeping award increases down to "normal" productivity increase would also keep overaward pay movements down to this level, there might be a case for urging such a policy on the Arbitration Commission on the grounds of price stability or preventing an undue increase in prices. But apart from the uncertainty of moderating the rate of overaward increase through such a policy, it should be realized that, even if overaward pay does not rise faster than award wages and productivity, the *absolute* difference between those on award and those earning more than award wages would be widening continuously.

Some may be persuaded that the prospect of achieving a more stable price level might outweigh the shortcomings of such a policy, particularly if disguised ways and means could be found to reduce the true gap between award and overaward receivers through such devices as overclassification, service allowances and fringe benefits. Others, however, may be inclined to advocate substantially larger award increases in the hope that, although the rate of overaward pay increases might also be stepped up, the latter would rise *proportionately* less than the former.[20] Such a policy would regard the disadvantage of rising prices as being offset by the greater measure of distributive

[20] There is some evidence for this in the period (1950-53) of large award increases. See K. J. Hancock "Wages Policy and Price Stability in Australia, 1953-60", op. cit.

justice to award earners. The choice between these two policies might be facilitated if we could establish what proportion of wage earners are really earning award pay and no more. There is, however, no information on this matter.[21]

It becomes apparent that the key to a wage policy which conduces to greater price stability and conforms to accepted standards of wage justice is to be found in the first place in the means for slowing down of overaward pay increases. If the rise of overaward pay could be checked, it would reduce the pressure on the Commission for "excessive" increases in award rates. And in so far as large award increases do accentuate the size of overaward pay, the circle would be cut if overaward pay could somehow be stabilized. But this is easier said than done. Keeping the rate of unemployment between 2 per cent and 3 per cent would probably restrain overaward pay movements, but apart from its political difficulties such a policy carries the real danger that price stability is enjoyed at the cost of considerable economic growth. To fix maximum wages would be impracticable for constitutional reasons and perhaps unwise for economic reasons. But does the position call for such drastic policies? Reference has been made to our record of moderate price increases in recent years and many would regard this degree of inflation as a tolerable feature of economic life. Others would look for greater price stability in anti-restrictive trade practices which, indirectly, could also restrain the advance of overaward pay. And the more optimistic would hope for some sort of an incomes policy machinery to be devised by appropriate changes in the procedure of the Commonwealth Arbitration Commission.[22]

Finally, the question arises whether the *frequency* as well as the size of award adjustments undertaken by the Commonwealth Arbitration Commission may have a bearing on the growth of overaward pay. In a buoyant market, it is likely that the continued pressure for higher wages must be met to a greater extent by overaward payments if award adjustments are infrequent. The distributive process does not wait patiently on the Commission's decisions! This would not matter much if, when award increases take place, overaward payments are largely absorbed. The evidence suggests that this is not likely to happen.[23]

To help overcome this problem, it has been proposed that the general level of award wages should be adjusted more frequently.[24] The underlying objective of this proposal is not to eliminate overaward

[21] Regular official statistical surveys of the size and incidence of overaward pay would assist a great deal in framing wage policy.

[22] See J. E. Isaac, "The Machinery of an Incomes Policy", in *Wages and Incomes* (Sixth Autumn Forum, Economic Society of Australia and New Zealand, Victorian Branch, 1964).

[23] See the results of the 1963 Survey referred to above. Although these results are not strictly comparable with those of 1955-60, it is interesting to point out that between 1960 and 1963, despite the intervening period of recession, overaward pay more than doubled for most grades of labour in the metal industries.

[24] See R. I. Downing, and J. E. Isaac, "The 1961 Basic Wage Judgment and Wage Policy", *Economic Record*, Vol. 37, December 1961.

payments but to slow down their growth, so that the leadership in the movement of the general wage level will rest more firmly with award determinations. Overaward pay may be expected to continue to play a part, but only an ancillary part, in providing a desirable degree of flexibility in the wage structure.

J. E. Isaac

Monash University

APPENDIX

The Surveys cover, in the period 1955-60, between about 1,360 and 1,900 establishments annually and between about 52,000 and 58,000 employees in five States—New South Wales, Victoria, South Australia, Queensland and Western Australia. About half of the establishments and more than half of the workers were in New South Wales.[25] The Surveys were not based on any selected sample of firms but were simply the result of the returns received from the members of the AMIA, the majority of returns being probably from the larger firms. Variations in the number of returns from year to year and the changing composition of those who submitted returns reduce the comparability of the Surveys from one year to the next.

The Surveys relate to the earnings of the first week in September to each of the years 1955-60. This has the disadvantage that certain items of payments, especially overtime and payment-by-results earnings, may be affected by accidental factors which may distort comparisons from one year to the next.

The Metal Industries Surveys distinguish between overaward payments based on measured results (such as certain types of incentive payments) and overaward payments based on time. The latter include such items as attendance bonus, merit money as well as straight overaward payments. All these payments are not unequivocally related to measured performance; and there is a case for treating this class of payments only as the overaward portion while regarding overaward payments based on measured results as being more akin to overtime earnings.

However, in practice the distinction is much more arbitrary, the two methods of payment being used as alternative methods of achieving the same result. In many instances, incentive payments, even though based on measured results, are contrived or adjusted to provide a standard of earnings consonant with what might be necessary to retain or attract labour.[26] Moreover, where payment-by-results operate, the straight overaward payments, merit payments, etc. which exist alongside payment-by-results are usually based on the average incentive bonus being paid. Interestingly enough, the 1960 Survey shows that payment-by-results is more commonly employed in the larger firms so that while total overaward payment per worker is similar in amount, its composition between overaward based on measured results and overaward based on time varies between large and small firms.

For these reasons, it would be wise not to make too much of the difference between them. For purposes of this paper overaward payments will be understood to include both types. In so far as such a measure exaggerates the size of overaward payments in the strict sense, it would probably be offset by the existence in some degree of fictitious overtime earnings excluded from overaward calculations and by the practice of overclassifying workers.

The availability of figures for each of ten male occupational classifications provides an opportunity of comparing drift for different classifications. But this must be qualified with the caution that over-classification of particular grades may disguise the operation of overaward payments. For example, persons doing unskilled labouring tasks may be classified as tradesmen's assistants or process workers in order that the employer may avoid appearance of paying overaward amounts.

Another deficiency in the Surveys is that Ordinary Time Hours (as distinct

[25] These figures should be compared with the 1961 Census for employment in Founding, Engineering and Metalworking. For Australia there were 286,093 male workers and 45,757 females. The Metal Industries Surveys, therefore, covered nearly 20 per cent of employees. The Census figures for New South Wales were 137, 861 males and 22,682 females.

[26] This fact was revealed in a number of cases in a survey recently undertaken in the Melbourne area.

APPENDIX TO FIGURE 1

Metal Industries All Male Average Overaward Pay Adjusted to a 40-hour Week, by States 1955-60 (in shillings)

	1955	1956	1957	1958	1959	1960
New South Wales	35·9	41·8	43·0	44·4	46·7	53·3
Victoria	34·3	37·2	35·9	44·0	38·5	42·7
South Australia	25·5	27·1	25·0	26·8	29·4	34·7
Queensland	9·7	15·1	15·4	18·2	17·9	20·4
Western Australia	12·1	11·0	11·0	13·9	9·3	11·2
Five States Average*	30·6	34·9	34·9	38·7	37·9	43·1

Source: Metal Industries Surveys

* Weighted by Commonwealth Statistician's figures for average employment in the metal trades in each State.

APPENDIX TO FIGURE 2

Metal Industries Overaward Pay Adjusted to a 40-hour Week, by Occupations in New South Wales—1955-60 (in shillings)

	1955	1956	1957	1958	1959	1960
Toolmakers	39·2	48·2	56·5	53·8	59·7	67·5
Fitters	37·5	39·3	43·1	42·6	43·8	53·6
Sheetmetal Workers, 1st Class	29·7	37·5	39·1	39·7	38·2	45·1
Boilermakers	41·7	42·7	45·2	47·7	50·7	61·7
Moulders	41·5	48·6	48·7	51·4	50·5	59·8
Machinists, 2nd Class	32·8	34·8	36·3	36·9	38·4	47·8
Process Workers	37·8	47·5	47·4	45·5	48·4	49·6
Foundry Labourers—Assistants	37·3	48·8	40·9	49·6	58·3	54·5
Foundry Labourers—Unskilled	50·8	55·5	51·2	61·5	65·5	53·9
Unskilled Workers	36·3	37·0	45·3	41·2	38·1	43·2
All Male Average*	35·9	41·8	43·0	44·4	46·7	53·3

Source: Metal Industries Surveys

* Weighted in proportion to numbers of the different categories recorded in returns in each year.

APPENDIX TO FIGURE 3

Metal Industries Overaward Pay Adjusted to a 40-hour Week, by Occupations in Five States—1955-60 (in shillings)

	1955	1956	1957	1958	1959	1960
Toolmakers	34·1	41·1	42·2	46·1	51·1	56·0
Fitters	28·7	34·6	33·9	37·5	36·1	43·6
Sheetmetal Workers, 1st Class	29·4	32·3	34·6	38·9	36·9	38·2
Boilermakers	32·5	35·8	37·3	46·4	41·4	48·7
Moulders	35·9	36·6	38·1	38·4	37·5	43·4
Machinists, 2nd Class	25·9	27·6	26·1	29·4	29·4	34·4
Process Workers	32·6	35·2	36·0	40·7	40·2	42·7
Foundry Labourers—Assistants	31·8	38·5	34·2	38·4	41·6	40·3
Foundry Labourers—Unskilled	51·3	48·7	42·2	52·4	46·0	46·9
Unskilled Workers	31·6	32·7	32·0	36·2	28·0	38·4
All Male Average*	30·6	34·9	34·8	38·6	37·9	43·1

Source: Metal Industries Surveys

* Weighted in proportion to numbers of the different categories recorded in returns in each year.

from Overtime) for 1955-57 are not strictly comparable with 1958-60. The basis of compiling Ordinary Time was changed from Hours *Worked* to Hours *Paid For*, the difference being accounted for principally by paid sick leave. This means that in order to adjust Ordinary Time Earnings (which increase payments for paid sick leave) and award payments to a 40-hour a week basis, two different sets of Ordinary Time Hours must be used. Earnings and therefore overaward pay would be overstated for 1955-57, but the bias from this adjustment is not likely to be large and can be allowed for in the interpretation of differences in overaward pay from year to year.

Finally in the list of shortcomings of the Surveys, although the period 1955-60 may be said to cover a full cycle (full employment, downswing, stagnation and upswing), the period is not long enough for any sophisticated statistical techniques.