A comparison of actual and minimum wages in the iron and steel industry (1978–1983)

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In 1983 two million employees in South Africa were subject to minimum wages in terms of industrial council or wage board legislation. Studies of wage determination have been hampered by the lack of knowledge of actual wage rates. This paper compares the wage rates as laid down by the Industrial Council for the Iron, Steel, Engineering and Metallurgical Industry with the wages contained in a national salary survey, the latter representing 'actual' market wages. A job evaluation system has been used as the basis of comparison between the minimum and market rates. Both minimum and actual wages display similar characteristics in that the lowest levels have received the greatest (real) increases over the period under consideration. The upper skilled levels have seen a decrease in wages in real terms, with increases in actual wages being lower than the rates at which the minimum rates have increased. Explanations are sought both from an economic and a socio-political point of view.

Tydens 1983 was 2 miljoen werkers in Suid-Afrika onderhewig aan minimum lone, in terme van die industriëlehof- of loonraadwetgewing. Studies van loonvasstelling was gekniehalter deur 'n tekort aan kennis van werklike loonratios. Hierdie artikel vergelyk die loonratios soos neergelê deur die Industriële Raad vir die Staal, Yster, Ingenieurs en Metallurgiese Industrie met lone vasgestel in 'n nasionale loonsopname, laasgenoemde reflekterend van 'werklike' markverwante lone. 'n Werksevaluasiesisteem was gebruik as basis van vergelyking tussen minimum en mark ratios. Beide minimum en werklike lone het dieselfde tendens getoon: die laagste vlakke het die grootste toename in die betrokke periode getoon. Die boonste vlakke het 'n afname in werklike terme getoon, met toenames in werklike lone laer as die ratios waarteen minimum lone toegeneem het. Verduidelikings word op beide ekonomiese en sosiaal-politieke vlak ondersoek.

Introduction

Minimum wages have been implemented in South Africa for many years. In 1983 almost two million employees were subject to minimum wage legislation. The many studies of these minimum wages have yielded various conclusions about the effectiveness of the industrial council and wage board determination systems. The analyses have been hampered by the lack of knowledge of actual market rates. Figures published by the government are usually categorized too broadly for detailed study. Comparisons across industries have had limited use because of the difficulty in obtaining a basis for such comparisons: because of differences in job content, jobs in one industry cannot necessarily or easily be compared with apparently similar jobs in another.

This paper uses two sources in order to permit a comparison of minimum and actual wages: the analyses of minimum wage rates set by South Africa's Industrial Councils (published by the Southern Africa Labour Development and Research Unit (Saldru), and the South African Salary Surveys (published by the P-E Consulting Group). Comparable wage rates have been extracted for the Iron and Steel industry for the period 1978 – 1983. (This period was chosen because of the lack of useful salary survey data prior to 1978; when the study commenced, no Saldru data were available for 1984 onwards.) A widely used (in South Africa) job evaluation system forms the basis of comparison between the two sets of data: Paterson's Decision Band Theory.

A direct comparison of actual wages and industrial council minima is presented in this paper. The methodology of calculating the wage rates is described together with the data representation and quantifiable measures for data analysis. Thereafter the two sets of figures are discussed in terms of pay differentials, structural aspects, and the influence of collective bargaining.

Although the author does not seek to attempt an explanation of the structure of wages in South Africa, he does discuss some structural aspects of wages in the Iron and Steel sector in the period 1978 – 1983. This approach supports the view of Dunlop (1966: 6) that: 'it is not satisfactory to treat wage determination in terms of a single rate ... wage theory must operate within the concept of a wage structure'.

Methodology

Positions were selected from the salary surveys and the Government Gazette (of 27 June, 1980) and graded according to the Paterson job evaluation system. Wage rates have been taken from the two sources, and, in the case of the salary surveys, weighted average figures for Asians, blacks (africans) and coloureds have been presented for the lower (unskilled and semi-skilled) categories. Whites have been included in the more skilled categories. The industrial council (IC) figures, naturally, make no reference to race.

Position grading

The positions selected from the salary surveys and the IC agreements for each Paterson grade are given in Table 1. (For detailed job descriptions, see Hipkin (1986: Volume II).)

In the Paterson system, the A band (grades A1, A2 and A3) refers to unskilled workers; the lower B band (grades B1 and B2) includes semi-skilled workers; the upper B band (grades B3 and B4) refers to semi-skilled workers (with a greater level of decision making than the lower B band), or to supervisors of A and lower B band workers; the C band includes skilled categories, such as artisans.

Calculation of wage rates

Weighted averages of the salary survey figures have been used to incorporate the different races. The weights are in accordance with the 1980 census figures for the Iron, Steel, Engineering and Metallurgical Industry: the weightings for Asians, blacks and coloureds are 3%, 83%, and 14% respectively; the weightings for whites, Asians, blacks and coloureds are: 16%, 2%, 73%, and 9% respectively.

With regard to the Saldru analyses of the industrial council (IC) agreements, the median figure has been taken where three or more positions are selected in one grade; the average has been taken for cases where there are two positions per grade.

It is necessary to make some mention of the term 'wages'. In the South African context there is a broad distinction between wages and salaries, in that wages may be calculated on an hourly basis and paid weekly, whereas salaries are paid monthly. The distinction is not significant for the purposes of this study so the term 'wages' will be used.

The wage rate is 'an abstraction of a unit of labour' (Cartter & Marshall, 1959: 108), and its precise meaning is important, particularly since it is not synonymous with income. The latter includes: 'earnings from work performed plus other sorts of income such as fringe benefits, dividends and interest, rents, gifts and other payments received during the period under consideration' (Ray, 1971: 206).

Ray (1971: 206) continued: 'Income in most economic models is the relevant economic concept which serves the function of allocating labour to various sectors of activity, to different occupations and to different geographic areas. This allocation function is achieved through the working of the labour market'.

The problem in using the concept of income is finding an apposite definition of the term that will consistently embrace generally accepted earnings components which are commonly found in published data. The monetary aspect can be dimensioned by a precise definition; the problem arises with the non-monetary elements. A basic wage rate (in monetary units per specific time period) is used as a generic term for analytical purposes, encompassing all workers regardless of levels of skill, education, training, and so on. The wage rate does not discriminate between basic earnings and additional earnings, such as overtime, or danger pay allowances. It would be of interest if forces could be isolated which individually determine basic wages as well as earnings

Table 1 Position grading positions

Paterson Grade	Salary survey positions	IC Agreement positions
A1	Operative-Grade 1, Watchman	Rate H, Rate I
A2	Operative-Grade 2	Rate G
A3	Operative-Grade 3	Rate E
B1	Operative Grade-4, Artisan assistant, Driver-light vehicle	Rate DDD
B2	Handyman, Plant Operator, Driver-heavy vehicle	Rate D
B3	Skilled operator Driver-extra heavy	Rate C
B4	Senior plant operator Shift supervisor	Rate B
C1	Artisans	Rate A

Table 2 Monthly rates in real terms (in 1975 rand) by Paterson grade, Iron and Steel industry

Grade	Market/ IC Wage	1978	1979	1980	1981	1982	1983	% Increase or decrease 1978–1983
A	Market-ABC	100	106	112	117	122	128	+28
	IC	98	99	101	108	119	114	+16
A2	Market-ABC	119	121	127	127	132	138	+16
	IC	105	105	107	112	123	117	+11
A3	Market-ABC	145	145	153	153	158	161	+11
	IC	134	133	136	143	150	141	+ 5
B1	Market-ABC	165	160	167	161	169	171	+ 4
	IC	146	146	149	154	162	152	+ 4
B2	Market-ABC	195	190	190	186	194	193	- 1
	IC	177	173	176	184	191	179	+ 1
B3	Market-W	301	289	298	288	278	271	-10
	Market-WABC	259	252	251	246	252	250	- 2
	Market-ABC	251	245	242	238	247	246	- 2
	IC	237	231	234	240	247	231	- 2
B4	Market-W	419	433	423	409	395	389	- 7
	Market-WABC	295	292	289	285	285	282	- 4
	Market-ABC	258	250	249	248	252	250	- 3
	IC	243	238	243	247	251	238	- 2
C1	Market-W	461	451	477	477	486	453	- 2
	IC	358	348	354	354	359	336	- 6
Percentage increase B4 (ABC) over A1 (market rates)		158	136	121	112	107	95	
Percentage increase of B4 over A1 (IC Rates)		148	140	141	129	111	109	

ABC denotes weighted average of Asian, black and coloured
WABC denotes weighted average of white, Asian, black and coloured
W denotes white rates only

and take-home pay. However, consistency precludes the use of other measures of income, more meaningful to the individual, such as take-home pay and gross pay.

Wages analysed in this paper are therefore basic monthly pay, explicitly exclusive of other measures of remuneration such as take-home pay, gross pay, shift allowance, bonus, overtime, etc. Monthly rates are converted from nominal to real terms (in 1975 rand).

The salary survey figures are referred to as 'market' or 'actual' rates, indicating that this is what the 'market' pays (median figures have been presented). The profile of organizations subscribing to salary surveys means that these organizations are possibly more progressive and better able to pay higher wages than those organizations that do not participate in such surveys. While this imperfection in the sample of 'market' wages may affect the absolute differences between the market and minimum wages, there is no reason to believe that there will be structural differences, or that the trends that will be identified will be any different.

Data representation

The results of the above analysis are presented in Table 2 and illustrated in Figure 1 which shows the variation of monthly wages by grade for each year (1978–1983)[1].

Quantifiable measures for data analysis

It may appear attractive to apply statistical techniques to the data, but closer observation indicates that the number of independent variables is limited (six years in the case of a time analysis, and eight grades with analysis by grade). Apart from considering overall changes in wages, a simple concept has been used which seeks to identify trends and progressions through the grades: divergence.

A measure of *divergence* (d) between market rates and industrial council rates has been chosen as follows:

$$d = \frac{\sum_{i=1}^{n} (\log MR_i - \log IC_i)}{n}$$

$$= \log \left(\prod_{i=1}^{n} \left(\frac{MR_i}{IC_i} \right) \right)^{1/n}$$

$$= \log \left(\text{geometric mean} \frac{MR_i}{IC_i} \right)$$

where MR = market rate; IC = minimum wage; and n = number of years.

This measure of divergence has been taken (rather than a standard deviation type formula where the difference between market and minimum rates would be squared, and then an overall square root taken) so that the calculation will include (negatively) the situation where the minimum wage could be higher than the market rate. Such a negative d in one or two years will reduce the overall divergence whereas the standard deviation would not discriminate between positive and negative divergences.

The divergence answers the question: does the differential between market and minimum rates progressively change from low to higher grades, or more specifically, does the amount by which the market rate exceeds the minimum wage at grade A1 increase or decrease with a progression through to C1? Table 3 shows how divergence varies with grade.

Discussion

The data in Table 2 (and illustrated in Figure 1) produce some interesting results which highlight differences and similarities in market (or actual) wages and industrial council minimum wages.

Pay differentials at the lower levels

In each year from 1978 to 1983 the 'dog-leg' phenomenon is evident in the IC rates: the pay curve has a flatter slope between grades A1 and A2 than between A2 and A3. This effect is only visible in the market rates in later years. Traditionally the A2 grade in the salary surveys includes hard, physical, manual labour. In order to compensate workers for this, Paterson and other job evaluation theorists suggest additional allowances, but no evidence of this is available. In fact, the contrary is more apparent: the differential between A2 and A1 is decreasing, with greater differentials between A2 and A3 (the top unskilled category). The likely explanation for the 'dog-leg' effect is the upward pressure on the lowest (A1) wages, evident in both the market and IC rates. Reder (1955: 833-852) proposed that reduction in wages (such as that seen in the A2 wages in relation to A1 wages) is caused by a dilution of skills. However, this occurs only during times of labour shortages (and there has certainly been no shortage of labour at this level in South Africa), so it is unlikely that A2 wages have decreased for this reason. Rees (1979: 162) put forward an explanation for the reduction of differentials at the unskilled level: 'No-one can be promoted ... from below, and workers can be attracted from outside the firm only by raising entry wages'. Again, this explanation is valid only where there is a shortage of workers.

The high levels of unemployment in South Africa at the unskilled (A1) level negate a simple supply and demand explanation of the upward pressure on A1 wages. Union negotiations at plant level are considered to have had little effect on the differentials between grades (despite MAWU's having encouraged negotiations at this level): the 'dog-leg' effect would indicate that unions are primarily concerned with raising the wages of the lowest level workers, relative to other unskilled workers, as opposed to raising, say, the level of wages of all groups of unskilled workers relative to semi-skilled workers. The call for a living wage is aimed at raising the wages of workers at the lowest levels.

A further reason for the 'dog-leg' effect at grade A2 is a general lessening of the distinction between jobs at the unskilled levels. This may be referred to as 'technological dilution' as opposed to the 'economic

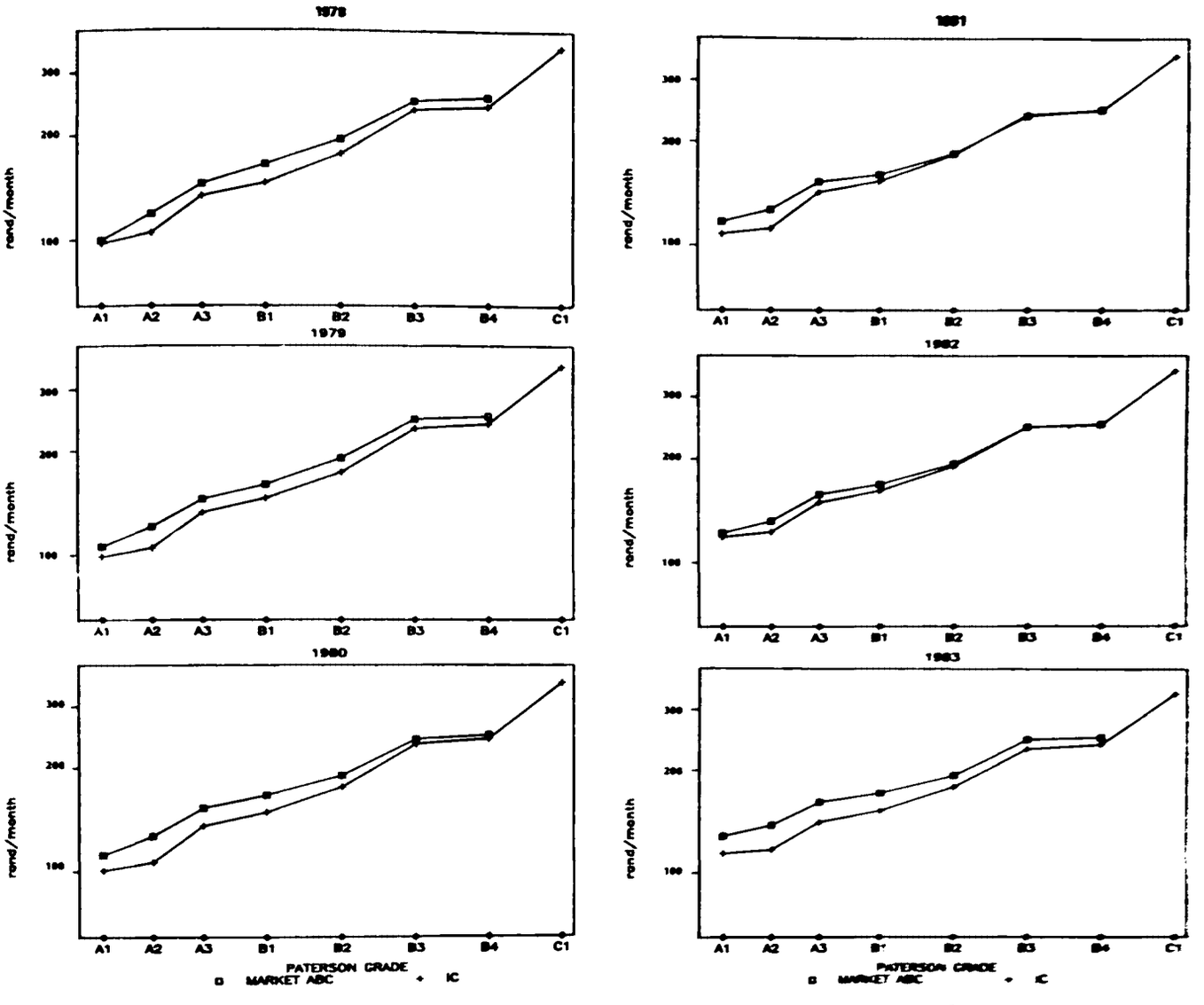

Figure 1 Monthly rates in real terms.

dilution' suggested by Reder (1955: 833–852). From a practical point of view, it becomes more difficult to isolate the decision-making component of jobs at the A1 and A2 levels. There is thus some confluence between these two grades which naturally leads to a reduction in differentials between them. This is evident in the Iron and Steel sector, but it is not apparent in all sectors (see, for example Hipkin, 1986).

The reasons for the overall upward component of pay compression may be termed socio-political: the calls for reducing the wage gap between whites and blacks have been made on socio-political grounds or for reasons of self-interest, rather than because of short-term economic necessity. Of course, these non-economic forces will ultimately be manifested in economic behaviour. The reasons for such socio-political behaviour are diverse. Two examples are given of the diversity of opinion. Du Toit (1981: 345) feared outside opinion: 'liberal' employers in South Africa are quick to agree that the wages and working conditions of their workers should really be improved ... it (is) necessary (quoting de Necker) "to put our house in order as quickly as possible in order to limit our vulnerability against that day when foreign investors and banks would be forced against their will to cease conducting business with us".

On the other hand, Saul & Gelb (1981: 26) believed there was no altruism in moves to improve the lot of the worker: 'Here one might note, ... Anglo American's recent urging that all mining houses raise black wages by 60 to 120% — because, as the *Financial Mail* (May 30, 1980) put it, of its "concern for workers". Needless to say, the reason lies elsewhere, in part in a blatant attempt to buy off these same workers. But we can see that this ploy is also crucial to overcoming the limitations on economies of scale and consumer demand ... imposed by the size of the white consumer market.'

The downward component of pay compression is evident at the upper semi-skilled levels (grades B3 and B4): there is a flattening off of the pay curves at these levels[2].

Reference to Table 2 will indicate the effective increases or decreases of wages over time for each grade (the final column in Table 2 gives the overall increase or decrease of the 1983 wages over the 1978 wages). A

positive real increase in minimum and actual wages over the period is evident for grades A1, A2, A3 and B1, with the increases in market wages greater than those of the IC rates. From grade B2 upwards (apart from the B2 (IC) rate), both market and IC rates have decreased in real terms, the decreases generally being larger for the higher grades.

Upward pressure at the lower grades can be further illustrated by deriving a linear line of best fit for the actual data, calculating the wage estimate from this line for each grade, and indicating whether the actual (market or IC) figures are above or below the line of best fit calculations. The regression lines for the 1978 and 1983 market and IC data are:

1978 market : $y = 0{,}0045x + 2{,}00$
1978 IC : $y = 0{,}0047x + 1{,}96$
1983 market : $y = 0{,}0033x + 2{,}09$
1983 IC : $y = 0{,}0038x + 2{,}02$

where y = log wage, x = grade.

The estimates derived from the regression lines for both the market and IC rates are shown in Table 4.

Table 4 shows that the A1 market rate has moved closer to the regression line estimate from 1978 to 1983. The A1 IC rate rose above the regression line estimate in 1983. Both of these indicate upward movement of wages for the lowest grades, relative to the wage structure as a whole. This leads on to further consideration of the structural aspects.

Some structural aspects

An explanation of the market and IC wage structures is not given in this paper, but it is useful to comment on some structural elements. In 1978 the B4 market wage (for Asians, blacks and coloureds) was 158% higher than the A1 figure, whereas the comparable percentage in 1983 is 95%. The B4 IC figure is 148% higher than the A1 wage in 1978, and 109% higher in 1983. Two significant points emerge from this: firstly, the differential between the unskilled and the upper semi-skilled rates has reduced over time (illustrating the effect of pay compression); secondly, this reduction has been more marked in the market wages than in the IC wages.

The first trend supports the contention that changing patterns in wages do not lie predominantly in the economic sphere, but rather in the socio-political domain: unemployment is higher in the unskilled categories, yet these have received the highest increases. At the upper semi-skilled, or even the skilled (artisan) level, where South Africa allegedly suffers from shortages of qualified staff, there were no real increases in the period under consideration. Of course, with more Asians, blacks and coloureds moving into the upper semi-skilled categories, there is now greater competition brought about by an effective increase in the supply of labour at this level.

The movement of Asians, blacks and coloureds into the higher grades must lead on to some consideration of white wages.

Although the weighting for whites is low, their inclusion raises the weighted average figures for grades B3 and B4 by several percentage points (as shown in Table 2). (Insufficient salary survey data are available for the skilled Asian, black and coloured market rates for grade C1.) The weighted all races figures (indicated WABC in Table 2) are higher than the IC rates, but the amount by which IC wages are exceeded decreases from 1978 to 1983. (In 1978, market all race figures for grade B4 are 21% higher than industrial council rates; the comparable figure for 1983 is 18%). At grade C1, the difference between the white pay curve and the IC rates widens from 1978 to 1983, despite the 2% decrease of white market wages over the period.

White market wages for grades B3 and B4 show the largest decrease in real terms over the period (10% and 7% respectively): the downward pressure on these (white) wages will be aggravated by the movement of Asians, blacks and coloureds into positions previously held by whites as this represents an increase in the supply of labour. White wages certainly remain consistently higher than the weighted average of all race groups, but the difference is smaller, the lower the grade. This is illustrated, for example, by referring to the following figures in Table 2: in grade B4, white wages are 62% higher than the weighted wage for Asians, blacks and coloureds in 1978, and 56% higher in 1983; in grade B3, white wages are 20% higher than the wages for Asians, blacks and coloureds in 1978, and 10% higher in 1983.

The relationship between actual and minimum wages can further be considered by analysing the divergence figures given in Table 3. The divergence (considering only the weighted Asian, black and coloured market rates) shows a decrease from A2 to B4. The lower divergence for A1 compared to that of A2 arises because of the dog-leg effect discussed previously.

The general decreasing divergence from unskilled to semi-skilled levels can be explained numerically by the trend presented previously: market wages in the unskilled categories have increased rather more rapidly in relation to comparable minimum wages than has been the case with the lower increase on the part of market rates in the upper semi-skilled grades relative to their comparable minimum wages.

Upward pressure on rates at the lower levels appears to have been more effective on market rates than on minimum rates. This is contrary to Saldru's findings with the SEIFSA figures of actual rates (see Saldru's Minimum Wage Analysis, 1983: 46), but it should be remembered that the data source for the 'market' wages used for this paper includes many of the larger organizations that have increased the actual wages of their unskilled workers more rapidly than the increase in minimum wages.

At the upper semi-skilled levels, the entry of Asians, blacks and coloureds into what were traditionally 'white' positions has resulted in an effective lowering of the market wages in these categories. The effect of this is to bring market and minimum wages together in the semi-skilled grades. The rapidly increasing divergence between white market rates and the minimum wages clearly arises because of the large differences between white and minimum wages.

The nature of the calculation of the divergence figures in Table 3 detracts from a 'feeling' for the relative magnitudes of these figures. The question therefore arises: are the differences in the divergence figures significant? A rigorous statistical test of significance is inappropriate, so it remains to see what is the order of magnitude between the market and minimum rates. An analysis of the figures in Table 2 shows that market rates generally exceed minimum wages by at least 5% (there are exceptions such as the A1 wages in 1978 where the market rate is only 2% higher than the minimum wage). It is therefore felt that the divergence figures in Table 3 are of such a magnitude that the trends in the divergence are significant.

The previous two sections have considered some of the 'social' and structural determinants of wages. These are two of the elements discussed by Corina (1972: 4–5) (who spoke generally of the labour market), and who conceived the South African labour market as: 'an atypical form calling for special analytical techniques and the specific introduction of 'social determinants' as explanatory variables or constraints. This ... embraces two chief variants — at one extreme, these sociological determinants may enter the model as specific exogenous forces and at the other extreme as specific variables contained within the system itself'.

The following section will turn briefly to a third aspect affecting wage determination: the collective bargaining process.

The collective bargaining influence

Workers in the unskilled categories (A band) are predominantly black, who were explicitly excluded from the collective bargaining process until after the Wiehahn recommendations were implemented from 1979 onwards. However, the Metal and Allied Workers' Union (MAWU) only joined the IC negotiations in 1983. Before 1983, employees were represented by 14 unions all of which were affiliated to the Confederation of Metal and Building Unions (CMBU), except the Suid-Afrikaanse Yster-, Staal- en Verwante Nywerhede Unie (Y&S) and the Steel, Engineering and Allied Workers' Union (SEAWU). The various unions will thus fight for varying interests: Y&S will be particularly interested in its (white) members' wages: CMBU represents many skilled workers, whereas MAWU (which belongs to the International Metalworkers Federation (IMF) grouping and other IMF unions were concerned (during the period under consideration in this paper) with about 100 000 mainly unskilled workers (Saldru Quarterly Bulletin, 3/1985:37).

MAWU adopted a different approach to bargaining at meetings of the National Industrial Council for the Iron, Steel, Engineering and Metallurgical Industry (NIC), in that MAWU was represented by a number of its members, all of whom participated in discussions. This contrasted with the centralization of negotiations on the part of the other parties, in that only one spokesperson from each side actually negotiated. MAWU had achieved limited success on the NIC, so it also extended its bargaining to individual factory floor levels.

The different approaches to negotiating do not imply negotiation on a racial basis, but rather that unions will press for higher wages in those categories in which their members are employed.

Although black membership of unions was clearly growing, and although 'the influence of unions cannot be ignored, (the effect of unionisation) should not be thought of as having a single, direct relationship with wages. It would be necessary to explain why wages for (unionised) top grades fell in real terms, while real wages for (unionising) lower grades rose. Full account would have to be taken, too, of the abundant supply of low-skilled labour while shortages exist of skilled labour ... It would appear that the key variable has been militancy, rather than unionisation'. (Saldru, Minimum Wage Anlaysis, 1983:44).

Table 3 Divergence between market and minimum wages, Iron and Steel industry

Grade	Racial category	Divergence
A1	ABC	0,0299
A2	ABC	0,0579
A3	ABC	0,0387
B1	ABC	0.0385
B2	ABC	0.0267
B3	ABC	0.0148
B4	ABC	0.0138
B3	WABC	0.0268
B4	WABC	0.0732
C1	W	0.1238

Table 4 Estimates of market and IC rates

	1978			
Grade	Market (ABC)	Actual estimate[a]	IC	Actual estimate
A1	107	- 7	98	0
A2	121	- 2	111	- 6
A3	137	+ 8	126	+ 8
B1	160	+ 5	148	- 2
B2	193	+ 2	179	- 2
B3	233	+18	216	+21
B4	282	-24	261	-18
1983				
A1	129	- 1	111	+ 3
A2	141	- 3	123	- 6
A3	155	+ 6	137	- 4
B1	173	- 2	156	- 4
B2	199	- 6	182	- 3
B3	228	+18	213	+18
B4	262	-12	249	-11

[a] A + sign indicates that the actual market or IC figure is above (greater than) the regression line estimate

This quotation from Saldru needs some qualification: the 'unionised'/'unionising' distinction coincides with the 'established'/'emerging unions' distinction. Generally it has been the 'emerging' (independent) unions that have been militant (of course, this is not to say that all strikes have been organized by unions, or even related to unions). It is therefore not possible to draw such a sharp distinction between militancy and emerging unions. Saldru's last sentence should more accurately read: it would appear that the key variable has been militancy on the part of the emerging unions, rather than action on the part of the established unions.

From a wage implementation point of view it will be interesting to note whether there are increasing calls for combining grades, particularly at the lower levels. It has been seen that the differentials between Grades A1 and A2 have been reducing over time, so there may be logic in seeking to combine these: from the employees' point of view, entry at the lowest grade (say A1) can now lead to advancement to the top of the second grade (say A2), without a change in job content; from the employers' side, it is possible to pay the minimum wage to a larger number of workers (those in grades A1 and A2), thereby possibly reducing their wage bill. This does, of course, reduce the employers' opportunity for providing a career path, with predetermined promotional prospects.

Conclusion

This paper has presented market wages and industrial council minimum rates in the Iron and Steel sector. The purpose was to analyse the relationship between these two sets of figures. Both exhibit some similiar characteristics in their structures, and follow certain trends over time. Specifically, there is evidence of pressures at the lowest levels which have resulted in upward movement in both market and minimum wages, contrary to expectations which may be based on supply and demand considerations. There is downward pressure at the upper semi-skilled grades, particularly in market wages. In this case the supply of labour is increasing with greater numbers of blacks taking the jobs previously done by whites.

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Notes

1. It will be noted in Figure 1 that the abscissae are not linear: this is in accordance with Paterson's proposition that the pay curve will be linear if log pay (as ordinate) is plotted against grade (as abscissa) with constant band width. This means that the width of the A band (A1, A2 and A3 together) is equal to the width of the lower B band (B1 and B2), which is equal to the width of the upper B band (B3 and B4) (see Paterson, 1972).
2. In the Paterson system, the upper bands (such as grades B3 and B4) represent the supervisory levels, as well as more complex levels of decision making. The difference in job content is thus one of degree, such as the number of subordinates or intricacy of job operation. The differences between the positions classified into these grades (B3 and B4.) are not necessarily as large as, say, between B2 and B3.

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