

**Special Problems in Securing a Reduction in  
Working Hours:  
The Case of Security Workers**

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## **Abstract**

The paper considers the complex process of introducing a regime of shorter working hours in the private security sector in South Africa. While the process of reducing the working hours of security workers in 1999 was bold, there is potential for real gains and losses to be derived from the process and this depends on the system and levels of compensation that are negotiated for the period of transition to the new schedules in working hours. A reduction in normal working hours can affect the size of the normal wage and it has an impact on the proportion of remuneration that can be earned from overtime work. A tension can exist between the method of compensating wages during the phase in which working hours are being reduced. This tension exists between maintaining the old hourly rate or maintaining the old aggregate salary levels of employees. The former shifts the burden of a reduction in working hours onto employees, while the latter results in the burden falling upon employers. The former path was the one followed when working hours were reduced in the South African security sector. Where the old hourly rate is maintained, a reduction in working hours will not have a dramatic impact on the costs of employers and is therefore likely to coincide with an increased demand for labour in the sector. Alternatively, if the reduction results in the cost burden being borne solely by employers, particularly through an adherence to the old aggregate wage levels, wage employment elasticities suggest that it will result in disemployment effects. The paper contrasts the trade-offs between these distinct outcomes.

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## **1. Introduction**

It is often said that practice is the best test for theory. The realm of practice usually establishes the grounds to test a theory to the limit. Perhaps, the difficulties of securing a reduction in working time regimes for particular segments of the working population without imposing undue sanctions on their material conditions is an instance where this can be demonstrated. A similar qualification applies to the operational capacity of employers. It also establishes the grounds where the outlines of a new theory can be sketched. The persistence in the practical difficulties to the resolution of this objective are more surprising because so much scrutiny has been given to the question of the wage, employment and cost impact of a reduction in working hours in the theoretical and scholarly literature. What are the practical difficulties and why do they persist? Our analysis of the experience in securing a new regime in the length of normal and overtime working time for workers in the South African security sector highlights the complexities and difficulties associated with the process.

## **2. Wage Regulation in the Security Sector**

The wages and conditions of employment for the majority of employees in the security industry has until recently been covered by a wage determination agreement. The last wage determination agreement, Wage Determination 481 for the Security Services Trade was gazetted in 1998. The agreement acknowledged the historically differentiated working hour schedules for security guards by transmitting and specifying these into the agreement. This differentiated classification occurred for category A and category B security officers. Excluding overtime requirements, the maximum ordinary hours of work for security officers within Category A, was 48 hours per week. For Category B security officers the limit for ordinary working hours was set at 60 hours per week.

By 1999, the revision of the entire battery of labour legislation in South Africa had been virtually completed. With the exception of amendments to the existing legislative provision with respect to the labour market, which will take place intermittently, the new agreements between specific parties in an industry are beginning to incorporate the broader changes in labour legislation. The most far-reaching change, which resulted from the promulgation of a new Basic Conditions of Employment Act in 1997 was the provision for a drastic reduction in ordinary working hours and the imposition of limits to the length of overtime hours that employees covered by the jurisdiction of the Act were required to render. Consequently, the establishment of a new Determination for employees in the Security Sector not covered by a bargaining council agreement was designated as Sectoral Determination 3 of 2000 and the central objective conveyed through its provisions is to establish conformity between the working hour regimes in the industry with that contained in the Basic Conditions of Employment Act. The Sectoral Determination regulates the conditions of employment of employees in the security sector who were not already covered by an agreement. Examples of those who fall outside the ambit of the new determination are security employees covered by in-house agreements or bargaining council agreements such as that for the Road Freight Industry (Government Gazette No.22102, 1 March 2001).

## **3. The Security Sector in South Africa**

Over the last decade, the security industry in South Africa has experienced one of the most rapid trends in employment growth. A plethora of organisations representing the interests of employers and unions have also mushroomed as a consequence of these growth trends. By 1996, 2200 private security guard companies had registered with the Security Officers' Board and it was estimated that more than 650 companies had done so annually since 1991 (Star 8/4/1996). The large-scale entry of firms to the industry has also been characterised by large-scale exit as security firms have tried to balance their presence in the industry with the intense competition for business. But the industry has also been associated with a rather fragile and explosive industrial relations climate with intensive

national and regional strike activities occurring at various points during this period.

Research conducted by the Institute of Race Relations showed that the number of private security companies had more than doubled from 2600 in 1994 to 5586 in 1998. While there were 128 000 active private security officers in the guarding industry in South Africa in 1998, there were also 188 000 security officers who were inactive: being registered but not employed. In addition to those employed in the guarding sector of the private security industry there were some 200 000 in-house security guards, 50 000 security personnel in the alarm systems sector, 40 000 in general services and 20 000 in response services. The ratio of personnel in the private security industry (all categories) to uniformed police officials was 4:1. The ratio of private security guards (in-house and contract) to uniformed police officials was 3:1 (South African Institute of Race Relations, South Africa Survey 1999-2000, p.74). By January 2000, the number of private security officers active throughout the country had increased to 163 545. Estimates put the industry's turnover in 2000 at roughly R12 billion a year slightly lower than the R15.45 billion that was allocated to the police budget in 2000/01 (South African Institute of Race Relations, South Africa Survey 2000/2000, p.141).

Among the major issues of contention for employers in the industry is the relatively low economic barriers to entry. This imposes severe constraints on established firms in the sector to defend their share of the market by having to resort to similar tactics as those engaged by many of the new entrants. Consequently, this exerts pressure on particular aspects of the expenditure by firms in the sector and as 'soft targets', conditions of employment are normally the first items that are either overlooked or abrogated by employers. Even government departments and agencies, have been accused of contributing to the perpetuation of a climate of intense price competitiveness through its tendering process by usually accepting the lowest bid. Self-regulation merely reinforces the standards of the group that are the lowest common denominator among employers and establishes these as the standards for the industry as a whole. Increased competition between firms in the industry and higher insurance premiums have been identified as the key factors eroding profit margins.

Some firms have been attempting to establish a niche as hi-tech security firms but the start-up costs associated with this move are estimated to be very high (Financial Mail, 5/3/99). As a result it is forecast that rationalisation in the industry could take the form of mergers and consolidations. A stark example of such an occurrence has been the merger between Fidelity Guards and Khulani Security in 2000. Diversification and the need to gain market share and maintain profit levels through economies of scale has encouraged some of the larger players in the field such as Coin, Fidelity, Khulani and Gray to develop a client base in African countries outside South Africa. Apart from its core function in the cash-in-transit and guarding services, Fidelity for instance has attempted to cultivate and grow 'low-tech' services such as contract cleaning, office hygiene, pest control and the provision of indoor plants to corporate clients. Gray Security provides protection for less tangible assets, such as electricity and water supply depots (Financial Mail 5/3/99).

The obverse to the intense price competitiveness of the industry was a situation of neglected employment conditions for the majority of security personnel in the sector. It is here that firms fail to comply with regulations and standards set out by government agencies such as the Employment Conditions Commission. The rapid employment growth in the industry and the profit squeeze on employers gave rise to a situation in which employment growth was being registered at the lower end of the skills spectrum. In 1997 the media reported that three quarters of security guards and officers were entrenched at the bottom rung of the qualifications scale possessing mostly an E-grade qualification (Star 21/4/1997). While the grading structure was generic to the industry as a whole and symptomatic of the skills pool from which new recruits were drawn into the industry, a range of pressing issues were identified as the crux of the trade union negotiations with employers in the 1997 round of wage negotiations. The issues identified by trade unions was the need to establish a national provident fund for security workers, a guaranteed 13th cheque for all security officers and guards as well as the payment of allowances for dog and firearm handling.

## 4. Character of the Industry

There is a significant variation in the estimate of the number of employees in the Security Industry. The Joint Professional Security Employer Alliance estimates there to be 191 413 employees, of whom 188 383 are registered as active Security Officers. The residual is made up of employees who occupy support staff positions and security officers who fall outside the jurisdiction of the sectoral determination agreement. Unlike the case for domestic workers, the October Household Surveys does not allow categorical breakdowns to be derived on the employment profiles of security officers, security guards and night watchmen/women. Instead, these employment categories are spread through a number of sub-divisions. These include the police services, the prison services, rescue services, the emergency rescue services, the transport services and the delivery services. Essentially therefore, the work of security officers is interspersed within all these sub-divisions. Until more accurate job categories are captured through the October Household Surveys, the figures of the Joint Professional Security Employers Association are the only indicators of employment levels in the sector at our disposal.

Further breakdowns of the distribution of employment according to categories that are pertinent to our analysis is however available to 'insiders' in the industry. Although the Joint Professional Security Employer Alliance is unable to provide exact breakdowns of the grades into which its employees are classified, the Alliance provides the following estimates based on information received from the Security Officers Interim Board:

**Table 1: Estimate Number of Employees in Employment Grades**

Employment Grades	Estimated Number of Employees	Percentage of Employees*
Grade E	7765	4
Grade D	13588	7
Grade C	77645	41
Grade B	50469	26
Grade A	38823	20
Other (Support Staff)	3030	2
Total	191413	100

Source: Submission by the Joint Professional Security Employer Alliance to the Employment Conditions Commission (13 March 2001)

\* Signifies calculation excluding employees not covered by the Determination Agreement.

The Joint Professional Security Employer Alliance however add the following qualification to the above ratios: 'Actual employment figures may, however, vary, as many security officers are over trained and are employed at lower grades than at which they are trained'. This means that many security officers who hold Grade E portfolios actually possess higher qualifications from what the industry is paying.

## 5. Sectoral Determination No. 3

Previous determinations made provision for different normal working hours to be specified for security officers. These ranged from 48 hours for those classified in Category A to 60 hours for those in Category B. All other remaining employees had a normal working week of 46 hours which was set according to the earlier Basic Conditions of Employment Act (1983). The Sectoral Determination Number 3 set out to change these. It did so by adopting a key long-term objective of the new Basic Conditions of Employment Act of 1997 concerning 'the progressive reduction of the maximum ordinary hours of work to a maximum of 40 ordinary hours of work per week and eight ordinary hours of work per day' (Basic Conditions of Employment Act No.75 of 1997, clause 9 (3)). A rapid time-frame for the phasing of shorter working hours was introduced into the determination agreement with the ultimate aim of abolishing the distinction between the two different categories of security officers, and secure an alignment between the provision of ordinary working hours. The agreement was signed by the Minister and gazetted on 25 February 2000. The agreement conveys the intention of the Ministry of Labour to reach a 45 hour ordinary working week for all employees including all security officers within three years from its date of gazetting. The agreement makes immediate provision for all employees in the security industry who are not security officers to work no longer than 45 ordinary hours of work per week.

In order to collapse the two categories (category A and B) that demarcates security officers into one category, the determination provides for the ordinary hours of work of security officers who were required to work 60 ordinary hours in a week to be immediately reduced to 55 hours. Limitations on the working of overtime were set to correspond with those contained in the Basic Conditions of Employment Act (1997). The determination agreement further pronounced that at the end of the first year, the ordinary hours of security officers who were required to work 55 ordinary hours a week would be reduced further to 50 hours. At the end of the second year and the commencement of the third year, security staff working longer than 45 hours per week, would have their ordinary working hours reduced to the maximum 45 hour limit. Doing so means that the normal working hours for security workers would be brought into alignment and would also comply with the provisions of the country's labour legislation. This would include those security officers working on an ordinary weekly working hour schedule of 50 hours and those on the 48 hour working schedule. So the reduction in the ordinary hours for those on the 48 hour weekly schedule only comes into effect at the beginning of the third year of the Labour Minister's order that sets the sectoral determination.

Once the ordinary hours of work for all security officers is standardised to 45 hours per week, the previous differentiation along categories (categories A and B) falls into abeyance. However the present grading system that remunerates security officers in particular by qualifications, that are regulated through the Security Officers' Board and recognised throughout the industry, will continue to form the basis of promotion and remuneration. These instruments grade security officers from Grade A at the upper remuneration scale to Grade E at the bottom. The salary or wage differential between these grades is almost double and ranges roughly between 1.85 and 1.98. This data is shown in Table 2 below. Only through the systematic improvement in qualifications can security officers proceed through the grading structure and so benefit from higher rates of remuneration paid in higher grades.

While the reduction in working hours leads to a corresponding decline in the earnings derived from normal working time, the reductions do not affect earnings from overtime nor does it affect earnings attributed to bonuses. In fact, with the fall in earnings, allowance has been provided for an incremental adjustment to the annual bonus and although this does not provide compensation for the decline in aggregate earnings which the reduction in working hours causes, the earnings derived from the annual bonus shows an upward movement. This has been achieved by changing the manner by which the annual bonus is calculated.

**Table 2: Salary and Wage Benefits of Security Officers covered by the Sectoral Determination**

Normal Working Week: 55 Hours (Year 1: 25 Feb 2000-24 Feb 2001) (Assume a 6.5% Wage Increment)						
Detail	Calculation	Grade A (R10.52)	Gr.B (R8.60)	Gr.C (R6.31)	Gr.D (R5.59)	Gr.E (R5.22)
Normal Time	$55 \times 13/3 \times \text{Rate}$	2507.27	2049.67	1503.88	1332.28	1244.10
Overtime	$10 \times 13/3 \times \text{Rate} \times 1.5$	683.80	559.00	410.15	363.35	339.30
Annual Bonus	$55 \times \text{Rate} \times 52/12 \times 0.34/12$	71.04	58.07	42.61	37.75	35.25
Cleaning Allowance/shift	$R1.5 \times 13/3$	6.50	6.50	6.50	6.50	6.50
Night Shift Allowance	$R1.35 \times 7 \times 13/3$	40.95	40.95	40.95	40.95	40.95
Total Salary		3309.56	2714.19	2004.09	1780.83	1666.10
Normal Working Week: 50 Hours (Year 2: 25 Feb 2001-24 Feb 2002) (Assume a 6.5% Wage Increment)						
Detail	Calculation	Grade A (R11.20)	Gr.B (R9.16)	Gr.C (R6.72)	Gr.D (R5.95)	Gr.E (R5.56)
Normal Time	$50 \times 13/3 \times \text{Rate}$	2426.67	1984.67	1456.00	1289.17	1200.33
Overtime	$10 \times 13/3 \times \text{Rate} \times 1.5$	728.00	595.40	436.80	386.75	360.10
Annual Bonus	$50 \times \text{Rate} \times 52/12 \times 0.56/12$	113.24	92.62	67.95	60.16	56.02
Cleaning Allowance/shift	$R1.60 \times 13/3$	6.93	6.93	6.93	6.93	6.93
Night Shift Allowance	$R1.44 \times 7 \times 13/3$	43.68	43.68	43.68	43.68	43.68
Total Salary		3318.52	2723.30	2011.36	1786.69	1667.06
Normal Working Week: 45 Hours (Year 3: 25 Feb 2002-24 Feb 2003)						
Detail	Calculation	Grade A (R11.93)	Gr.B (R9.76)	Gr.C (R7.16)	Gr.D (R6.34)	Gr.E (R5.92)
Normal Time	$45 \times 13/3 \times \text{Rate}$	2326.35	1903.20	1396.20	1236.30	1154.40
Overtime	$10 \times 13/3 \times \text{Rate} \times 1.5$	775.45	634.40	465.40	412.10	384.80
Annual Bonus	$45 \times \text{Rate} \times 52/12 \times 0.78/12$	151.21	123.71	90.75	80.36	75.04
Cleaning Allowance/shift	$R1.70 \times 13/3$	7.37	7.37	7.37	7.37	7.37
Night Shift Allowance	$R1.53 \times 7 \times 13/3$	46.41	46.41	46.41	46.41	46.41
Total Salary		3306.79	2715.08	2006.13	1782.54	1668.01

While the annual bonus is awarded as a lump sum at the end of a calendar year, the calculation to dis-aggregate it into discrete monthly lumps has the effect of marginally increasing the monthly wage and salary remuneration of security officers. It does so in a way that compensates them nominally for the loss of earnings as a result of the reduced ordinary working hours, which the sectoral determination specifies for the first to the third years of the agreement. The compensation however only protects the nominal value of monthly remuneration. Depending on the inflation rate per annum for succeeding years, there will be a real reduction in earnings. An example of the minimum monthly wage and salary rates that apply to Security Officers who work in from Grades A to E in Area A, for the period in which the provision of the Sectoral Determination apply is shown in Table 2.

Under an economic dispensation of high rates of inflation, the erosion in the real wage will be high: under an economic dispensation of low rates of inflation, the erosion in the real wage will be lower. By incorporating the change that an adjustment in the coefficient of the formula makes to the increase in the overall bonus payable to an employee, as a result of the reduction in normal working hours, one would be able to measure the effect this has on overall income. For the three years in which the reduction in hours of work have been designed to take place, the coefficient by which bonuses are calculated is increased from 0.34 in the first year to 0.56 in the second year and again to 0.78 in the third year. Thereafter it is normalised at a value of 1. The logic for this is to mitigate the drastic fall in wages and salaries for employees while providing for a phased adjustment in costs to employers. Zachmann (1986: 165) refers to such incremental adjustments as 'hours-dependent non-wage expenditures'.

The proportion by which earnings from ordinary hours of work contributes to the take home pay of employees will naturally fall when there is a proportionate increase in non-direct remuneration as is noticeable with the proportionate increase in remuneration derived from bonuses. The evidence

shows that at the beginning, during the first year of the agreement when a low coefficient was used to calculate staff bonuses, income from ordinary working hours contributed close to 75 percent of overall income. But it declines consistently thereafter, as a new coefficient for calculating the annual bonus is

introduced at the start of each new year, until income finally falls to just below 66.67 percent for some grades in the fourth and final year as can be calculated from Table 2. It has to be noted however that the exact proportion will depend on the grade at which a security officer is classified and the geographical area in which the incumbent's place of work is located. Over the four year period during which the introduction of a 45 hour working week has been designed to become operational, the proportion of earnings attributed to the annual bonus will double from just over 2 percent in the first year to between 5 percent and 6 percent during the fourth year.

After accounting for the remuneration of ordinary hours worked, the second highest paying item on the payroll of security officers includes the payment for overtime worked. The new determination makes provision for a maximum period of three hours overtime per day or ten hours overtime per week. Overtime however is not obligatory for employees: they can choose or choose not to work overtime. The payment due to overtime worked is at least one and a half times the normal wage rate. If overtime is worked to the maximum 10-hour limit per week, the monthly earnings contribution to the wages and salaries of security officers varies slightly according to grade but amounts to roughly 20 percent.

The determination agreement makes provision for a night shift allowance. The calculation that we have provided includes the full amount of the allowance in the overall remuneration package of all employees. In reality however, there may be a large degree of variation in the participation of security officers in night work: there might be an equivalent dispersion in night shift allocations, and some employees will be more inclined to work night shift and some less so. A recent submission by the Joint Professional Security Employer Alliance to the Employment Conditions Commission (13 March 2001) indicates that all employers who are members of the Alliance normally remunerate their employees with a cleaning allowance for every shift completed in a day. This means that on a 55 hour working week, just over three shifts will have been completed each week for each occupational category resulting in each employee being awarded with a shift allowance of R1.50 per week (R6.80 per month) in 2000 (year one of the Sectoral Determination agreement). Again, this is illustrated in Table 2.

The effect of these costs to employers will be shown in more detail in the wage simulations that will be illustrated in the latter part of this document. It should be noticed that not all costs borne by employers are conveyed directly as remuneration to employees. Some costs borne by employers insure workers against loss of pay that would result in their absence from work which unanticipated distresses may cause e.g. family responsibility leave. Other cost items are an obligatory rest period that workers are entitled to receive annually and for which they receive a wage payment at a rate that corresponds to their full normal working hours (e.g. annual leave). The wages that are paid in lieu of annual leave is not an additional income above their wages. However, the annual bonus, which is paid as a cumulative amount at the end of the year, normally preceding the period of annual leave, is a payment over and above the normal monthly wage and salary benefits. In order to factor the monthly effect of this once off payment to employees, our analysis disaggregates this to a monthly value, which has been incorporated into our assessment of the monthly employee remuneration. Finally, non-remunerative deductions include obligatory deductions on the skills levy as well as provident fund deductions, which could become a significant future cost item for employers but is really an insurance to provide income to workers during retirement.

## **6. Costs to Employers**

Using information derived from the Joint Professional Employer Alliance that had previously been submitted to the Employment Conditions Commission (13 March 2001), a number of different options based on the profile of the current wage costs to employers in the Security Industry, is illustrated. Although these represent aggregate figures for the industry, they provide a basis for tabulating the impact on costs to employers to implement the shorter working week for security officers. These options were devised using two substantially different concepts, which only the trilateral discussions between the employer organisations, worker organisations and the Department of Labour would be able to resolve. These concepts and the principles on which they are postulated are expressed in the following terms:

- (a) The principle that dictates what form compensation can assume in instances where a reduction in working hours has taken place is by means of the concept of 'lower pay for fewer hours'. The concept of 'lower pay for fewer hours' refers to the reduction in the monthly remuneration that employees obtain as a result of the reduction in normal working hours. Following the concept of 'lower pay for fewer hours', the reduction in hours does not change the hourly rate of employee earnings. This also implies that excluding other exogenous factors of employment expansion (e.g. growth of services, crime etc.), the need for employers to hire additional labour as a result of the reduction in working hours means that the wage and salary costs for normal and overtime work will remain unchanged. The cost increase of an employment expansion that is determined directly from a reduction in working hours therefore can be measured through the costs incurred on ancillary and non-wage benefits. These include: bonuses (annual, monthly etc), allowances (shift), and leave (annual and as is the case for the security sector, family responsibility leave). If the aggregate wage costs of employers remain the same, the increase in employment that comes about as a result of a reduction in working hours will not change the aggregate amount of payroll levies. The payroll levies will only increase if the additional employment generates costs to employers, which extend beyond the savings that they make by having to pay lower wages for the fewer hours that have been worked. This point is essential to grasp because it will form the basis of the tabulation used to generate Tables 5 and 6.
- (b) The concept of 'equal pay for fewer hours' is the extreme opposite of the concept of 'lower pay for fewer hours'. This concept is based on the premise that changes in the regimes of working time schedules must not be a measure borne solely by employees, because it is a compensation for historically evolved changes in labour productivity which have not been captured or compensated through wage claims. Under the concept of 'equal pay for fewer hours', the reduction in normal working hours leaves the final weekly and monthly salary packaged unchanged. Consequently, the concept of 'equal pay for equal hours' results in the hourly wage rate being increased by the proportion of the reduction in working hours. While employers are against the concept of 'equal pay for fewer hours' being adopted because it shifts the cost burden of the reduction onto them, the demand 'for equal pay for fewer hours' is likely to stem from representatives of the workers. The motivation for the demand would be because workers are imputed to experience aggregate salary and wage declines as a result of the introduction of shorter working hours.

## 7. Costs to Employers using the Principle of 'Lower Pay for Fewer Hours'

Without knowing the exact organisational character of specific business enterprises in the security sector, particularly with respect to the system of shifts, normal working hours and over-time hours, it is difficult to accurately portray the cost impact on employers of shorter normal working hours. Information on the breakdown of the shift regimes indicates that services are provided for three distinct regimes and is shown in Table 3.

**Table 3: Distribution of Shift Systems in the Security Sector according to Market Breakdown**

Shifts on which Services are based	Percentage
7 day per week service (12 or 24 hour, day and/or night shift)	60
5 day per week service (normally 12 hour shifts, Monday to Fridays)	10
5½ per week service (banking and retail sectors)	30
<b>Total</b>	<b>100</b>

Source: Submission by the Joint Professional Security Employer Alliance to the Employment Conditions Commission

Security firms that provide services for seven days per week will be required to structure their shift systems so that it conforms to the ambit of the law. The new provisions affect 60 percent of security officers in the industry. Overtime under a 7-day per week service that includes day or night shifts or both implies that the work on a Sunday will form part of the overtime segment of the working day. The challenge to firms who provide a seven day per week service for 24 hours per day or 168 hours per week is to develop a shift system which places their employees, in this case, security officers, on the maximum normal time and prohibits them from working beyond the maximum overtime allowed. Adjustments in the system of shift allocation would have to be introduced for every successive reduction in normal working hours, which the legislation specifies.

Roughly, only 10 percent of security officers are on jobs that provide a 5 day service which extends over a period of 12 hours. The new provisions in the Basic Conditions of Employment Act (1997) and the Sectoral Determination implies that as the normal level of working hours is reduced, security officers in such positions would be remunerated for overtime work. Without rendering more time to work, their remuneration as a result of the working hours reduction means that the normal time lost will be transferred to time for over-time. The working of over-time will increase from zero to the maximum duration permissible.

Overtime for 30 percent of security officers who work on a 5½ working week predominantly in the banking and retail sectors according to the Joint Professional Security Alliance is unavoidable. This is because it is invariably necessary for the same security officer to be on duty for the full week and for full time.

Now, the wide variation in the working cycle of security firms makes it rather difficult to calculate the precise impact of changes in working hours because the changes itself induce wide differences in the shift systems that are introduced to accommodate these changes. It is therefore necessary to work with aggregate data to simulate the effect of these changes. One can use the data supplied by the Joint Professional Employer Alliance in its submission to the Employment Conditions Commission, as a proxy for current costs to employers. The simulations of the changes in costs to employers of reduced hours can be performed using this proxy data.

**Table 4: Current Wage Costs to Employers in the Security Industry on Constant Prices**

Detail	Calculation	Costs in Rands (2000 Constant Prices)		
		2000	2001	2002
Normal Time (Averaged)	144 hours @ R5.22	3254.77	3254.77	3254.77
Sunday Time	24 hours @ R7.83	813.69	813.69	813.69
Public Holidays	24 hours @ R5.22	125.28	125.28	125.28
Annual Bonus	168 hours*4.33 *R5.22 @2.83%	107.46	177.31	248.23
Cleaning Allowance/shift	168/55*13/3 @ R1.50/week	19.85	19.85	19.85
Provident Fund	0%	0	0	0
Night Shift Allowance	R1.35 * 7*13/3	40.95	40.95	40.95
Annual Leave	1 in 17 days	218.91	218.91	218.91
Family Responsibility Leave	3 days per annum	43.78	43.78	43.78
Skills Levy	0.5% of (Normal + Sunday time)	20.34	23.47	23.83
<b>Total Cost</b>		<b>4645.03</b>	<b>4718.01</b>	<b>4789.29</b>

Source: Submission by the Joint Professional Security Employer Alliance to the Employment Conditions Commission

Table 4 depicts the monthly cost to employers of employing labour on a job schedule for a 24-hour day. The calculation is based on the remuneration rates of a Grade E security officer falling under Area A but also includes non-remuneration costs which are a cost to the employer. These costs include payment to engage staff on public holidays and because there is no obligation for employees to work on a public holiday for which they are paid at the normal rate, the employer is required to provide double pay to employees who work on such a day. It also includes a maximum payment for allowances, bonuses and family responsibility leave as well as the obligatory payroll levy for skills development training.

Ignoring for a moment the changes in price level and the reduction in working hours, a simulation has been provided for changes in the cost to employers as a result of the incremental increase in the annual bonus for employees. Had the reduction in normal working hours not taken place, the adjustment in the annual bonus which is a condition laid out in the Sectoral Determination would have resulted in the real aggregate labour costs of employers increasing by 1.6 percent in 2001 and 1.5 percent in 2002.

Using the proxy data contained in Table 4, two scenarios are possible under conditions of a reduction in the normal weekly working hours of employees.

#### **a) Measuring the Costs of Hiring Additional Staff**

Assuming that the maximum number of permissible overtime is being worked by the existing staff complement in the security sector, employers would be compelled to hire additional workers, if the reduction in the length of working hours occurs. What will the effect be of a shorter week on the labour requirements of firms and what are the costs of the changes that are required? A reduction in working hours from 55 to 50 hours implies that the capacity to employ additional labour at no extra cost to the wage bill will be equivalent to 9.09 percent ( $5/55 \times 100$ ). This is because the new employees will merely fill in vacancies equivalent to the number of hours that a shorter working week forgoes in lost production. On an aggregate, a 9.09 percent reduction in working hours necessitates a 9.09 percent increase in the demand for additional labour. Once this has been accomplished the level of service output is neither more nor less than it was before the reduction in working hours: it is exactly the same. But firms are obliged to honour all new staff members with the prevailing conditions of employment that existing members obtain. So all non-wage or indirect costs, which are still transmitted as a cost to required in year 2002, the following scenarios are illustrated in Table 7.

employers, will increase by 9.09 percent. Essentially therefore, using the data illuminated in Table 4, a 9.09 percent increment on non-wage costs increases the overall cost to employers by roughly 1.09 percent (or R50.80 if account is made for the increase in the skills levy). Even taking into account the incremental adjustment in the calculation of the annual bonus which increases from a factor of 0.34 to 0.56 from the first (year 2000) to the second year (2001) (approximately 65

**Table 5: Costs to Employers of Hiring Additional Staff due to a reduction in normal working hours from 55 to 50**

Cost Item	Rands (2000 constant prices)
Non-wage benefits for new employees (9.09% increase )	50.80
Incremental Increase on Bonus Payments	70.20
Incremental Increase on Bonus Payments for new employees (9.09%)	6.38
<b>Total costs of engaging new employees and paying higher bonuses</b>	<b>127.38</b>
Proportionate increase on aggregate cost to employers (ratio on R4645)	2.75%

percent). From the second to the third year, the factor increases from 0.56 (year 2001) to 0.78 (2002) (approximately 40 percent). The cost to employers is not as dramatic as the loss of overall remuneration is to employees and is shown in Table 5.

Therefore a reduction in working hours of 9.09 percent, which necessitates an equivalent and proportionate engagement of new staff personnel and adherence to higher bonuses for all staff results in roughly a 2.75 percent workforce cost to employers. While the reduction in working hours from 50 to 45 hours amounts to 10 percent and the increase in the factor value used to calculate bonuses increases by 40 percent (in contrast to the 65 percent in our example above), the costs to

**Table 6: Costs to Employers of Hiring Additional Staff due to a reduction in normal working hours from 50 to 45**

Cost Item	Rands (2000 constant prices)
Non-wage benefits for new employees (10% increase )	62.92
Incremental Increase on Bonus Payments	71.27
Incremental Increase on Bonus Payments for new employees (10%)	7.13
<b>Total costs of engaging new employees and paying higher bonuses</b>	<b>141.32</b>
Proportionate increase on aggregate cost to employers (ratio on R4718)	3%

employers of hiring additional employees will be marginally higher than the 2.75 percent recorded for the Year 2 of the provisions in the Sectoral Determination Agreement. This is shown below in Table 6 and is based on constant values, which simulate the upward change in the bonus calculation that is contained in Table 4.

This should not be confused with an annual salary increment, which is a requirement if the basic employee remuneration is to be kept in line with inflation. Therefore using simulations of a 4 percent, 6.5 percent and an 8 percent increase in nominal wages over the three year period, combined with a 2.75 percent increase in the cost of hiring additional staff members for year 2001 and the 3 percent

**Table 7: Monthly costs to employer (Rands) on full-time operational cycle (728 hours per month) and the effects of introducing a shorter working week combined with a 4%, 6.5% and 8% annual salary adjustment**

Period of Agreement	Detail (on 4% salary adjustment)	% Cost Change	Monthly Cost	Cost Impact	Real Cost Value
Yr 1: 25/2/2000-24/2/2001	55 Hour Week (Year 1)		4645.03		4645.03
Yr 2: 25/2/2001-24/2/2002	50 Hour Week + 4% Increment	2.75% + 4%	4963.68	6.86%	4704.91
Yr 3: 25/2/2002-24/2/2003	45 Hour Week + 4% Increment	3% + 4%	5317.09	7.12%	4790.17
	<b>Detail (on 6.5% salary adjustment)</b>				
Yr 1: 25/2/2000-24/2/2001	55 Hour Week (Year 1)		4645.03		4645.03
Yr 2: 25/2/2001-24/2/2002	50 Hour Week + 6.5% Increment	2.75% + 6.5%	5083	9.43%	4818.01
Yr 3: 25/2/2002-24/2/2003	45 Hour Week + 6.5% Increment	3% + 6.5%	5575.8	9.70%	5023.24
	<b>Detail (on 8% salary adjustment)</b>				
Yr 1: 25/2/2000-24/2/2001	55 Hour Week (Year 1)		4645.03		4645.03
Yr 2: 25/2/2001-24/2/2002	50 Hour Week + 8% Increment	2.75% + 8%	5154.59	10.97%	4885.87
Yr 3: 25/2/2002-24/2/2003	45 Hour Week + 8% Increment	3% + 8%	5733.97	11.24%	5165.74

The aggregate cost impact, which combines the cost of instituting a shorter working time regime with an estimate of the anticipated wage award, is shown in the second column from the right in Table 7. Since the hourly rate of remuneration remains the same, the costs to employers using the principle of 'lower pay for fewer hours' is as follows:

- If the annual wage award to all security employees for the period of the adjustments in hours is fixed at 4 percent, the cost impact on employers will be 6.86 percent for the second year of the Sectoral Determination Agreement and 7.12 percent for the third year. This includes the 2.75 percent cost adjustment to hire 9.09 percent more staff hours in the second year of the agreement (which eventually translates into the equivalent proportion of additional staff) and the subsequent 3 percent cost to hire an additional 10 percent of staff in the third year of the agreement (see calculation in section 8). Although it has not been highlighted in Table 7 above, a 4 percent wage adjustment that accompanies a reduction in working hours with the requirement of employing additional staff, exerts a real impact on employment costs of 1.29 percent for 2001 and 1.81 percent for 2002 respectively. These values are calculated from the extreme right hand column in Table 7. The calculation is generated on the assumption that the level of inflation for the entire period of the adjustment will average at 5.5 percent per annum.
- If the annual wage award to all security employees for the period of the adjustments in hours is fixed at 6.5 percent, the cost impact on employers will be 9.43 percent for the second year of the Sectoral Determination Agreement and 9.70 percent for the third year. Again, this includes the 2.75 percent cost adjustment to hire 9.09 percent more staff in the second year of the agreement and the subsequent 3 percent cost to hire an additional 10 percent of staff in the third year of the agreement (see calculation in section 8). A 6.5 percent wage adjustment that accompanies the reduction in hours and the employment of additional staff has a real impact on the costs of employment of 3.72 percent for 2001 and 4.26 percent for 2002 respectively. Assuming a constant inflation rate of 5.5 percent for the period of the adjustment, the changes in the real cost of employment are shown in the extreme right hand column of Table 7.
- If the annual wage awards to all security employees for the period of the adjustments in hours is fixed at 8 percent, the cost impact on employers will be 10.97 percent for the second year of the Sectoral Determination Agreement and 11.24 percent for the third year. As mentioned previously, this includes the 2.75 percent cost adjustment to hire 9.09 percent more staff in the second year of the agreement and the subsequent 3 percent cost to hire an additional 10 percent of staff in the third year of the agreement (see calculation in section 8). Finally, the real impact on the costs of employment of an 8 percent wage adjustment that coincides with a reduction in working hours thereby necessitating the employment of additional staff in the security sector will amount to 5.18

percent in 2001 and 5.73 percent in 2002. These percentage changes are calculated from the values shown in the extreme right hand column of Table 7. The simulation is generated on the assumption that the average inflation rate over the period of the adjustment will amount to 5.5 percent per annum.

## **b) Claims of Employers**

Referring to the reduction in working hours for security officers from 55 to 50 per week, the submission from the Joint Professional Security Employer Alliance to the Employment Conditions Commission contains the following claim:

‘Contrary to other industries, this reduction in hours will necessitate the employment of 20 percent more employees, just to service existing contractual obligations, with significant cost implications. While such job creation is laudable and strongly supports existing national policy, the cost thereof cannot be borne by the employer alone and similarly, cannot be passed on to the client’. (p.4)

Now the evidence that we have deployed demonstrates that the cost to employers does not increase at the same rate as the demand for new employees who are required to fill the posts which become available because of the decrease in the level of working hours. But assuming that the claims about the proportion of new employers required to fill the shortfall in vacancies caused by the reduction in working hours is indeed 20 percent, and therefore double the calculations that I am advancing, it does not translate into an equivalent increase in costs to employers. This has been the gist of our calculating procedure, which we have demonstrated above. A 20 percent increase in the proportion of new staff employed will have roughly double the impact that our own calculations show. Excluding adjustments for inflation and price changes, if 20 percent more staff are employed the direct costs borne by employers will increase by 5.5 percent in the second year of the Sectoral Determination Agreement and by 6 percent in the third year.

## **8. Employment Gains as a result of the Principle of ‘Lower Pay for Fewer Hours’**

Through a simple tabulating exercise, it can be shown how the real employment gains can be achieved in the Security Sector if the principle of ‘lower pay for fewer hours’ is adopted. It has to be borne in mind that the ‘lower pay for fewer hours’ actually means that the hourly rate of remuneration will remain unchanged but the aggregate salary or wage will fall as the level of working hours is reduced. This merely reinforces the substance of the argument that we have developed thus far. Even though the rationality for the calculation is tantamount to invoking the antiquated theory of the wages fund, such a calculation has pertinence for showing employment adjustment in the short-term. It is also likely to be used in forecasts of salary and wage expenditures in firms and hence serve as a mechanism for decisions on the emergency hiring of staff.

Taking into account that the current labour force for security workers is 188383 and assuming that on the aggregate a 55 hour week is normal, a reduction in working hours from 55 hours to 50 hours will have the following effect:

On a working week of 55 hours, a workforce of 188383 security officers contributes 10 361 065 hours in services to the sector. When the working week is 50 hours the same 188383 security officers contribute 9 419 150 hours to the sector. The number of hours that cannot be occupied by the existing workforce amounts to 941 915 hours. This means that a manpower shortage in the industry would have developed which would be registered as employment vacancies. Assuming that hiring and non-remunerative costs are zero, it means that the 941915 hours that employers have committed to honour their wage bill can be utilised to generate an additional 18838 jobs in 2001 on a working week schedule of 50 hours at no extra cost.

Therefore at 50 hours, a workforce of 207221 contributes 10 361050 hours of service to the sector. The simulation relates only to the working hours reduction/employment expansion elasticity. It therefore ignores exogenous growth and employment expansion that would have taken place in the sector even if the reduction in working hours had not taken place. If the working week is reduced to 45 hours the same 207221 security officers can only contribute 9324 945 hours to the sector. This means that there is a shortfall of 1 036 105 hours that cannot be occupied by the existing workforce. Based on our assumptions this means that 23025 new jobs can be generated in 2002 at no extra cost to the wage bill. This is equivalent to an 11.11 percent increment in the size

**Table 8: Employment Gains of a reduction in working hours on the principle of 'lower pay for fewer hours'**

<b>Year</b>	<b>Length of Working Week</b>	<b>New Jobs Generated after the reduction in the length of the working week</b>	<b>Size of Labour Force after the reduction in normal weekly hours</b>	<b>Percentage change in employment</b>
<b>2000</b>	<b>55 hours</b>	15699	188383	9.09
<b>2001</b>	<b>50 hours</b>	18838	207221	10.0
<b>2002</b>	<b>45 hours</b>	23025	230246	11.11

of the workforce. The gain in new jobs translates into an overall workforce of 230246 security officers for the sector.

The effect of the employment changes brought about by a reduction in working hours on the principle of 'lower pay for fewer hours' is illustrated in Table 8. While the evidence suggests that this is the most likely scenario for the future, it also allows inferences to be made about the reasons for the growth in the employment levels of security officers since the end of 1999. Although the information is not readily available to us, it can be said with confidence that the positive growth in the number of security personnel during 2000 can be attributed largely to the growth in service obligations that were made previously under the conditions of longer working hours. Employers still have to meet those obligations and perform the service. The reduction in working hours from 60 hours to 55 hours per week therefore required an expansion in employment. Assuming that hiring costs were zero, and that the number of service hours rendered was exactly the same as it is currently (i.e. 10361065 hours), this means that the reduction in normal hours from 60 to 55 in the year 2000, increased employment from 172684 (which we assume as the estimate for employment in the industry for 1999) to 188383. As a percentage increase in employment this amounts to 9.09 percent.

Despite the endogenous growth trends which the security sector has been experiencing throughout the 1990s, part of this is due to the relatively modest increases in real hourly wage rates that has prevailed despite the reduction in the length of normal working hours. This is largely because all the parties to the trilateral process tacitly acceptance the principle of 'lower pay for fewer hours'. The immediate reduction in the aggregate wage costs to employers operates in tandem with a positive working hours reduction/employment elasticity which contributes to employment being created as the reduction in working hours takes effect. Exogenous factors that have contributed to the growth of the security sector includes the phenomenon of the growth in services, the restructuring of the police force with more emphasis being placed on policing and less on guarding and protection as well as the growth of crime in the society generally.

Where it can be demonstrated that full compliance to the new regulations on working hours is indeed taking place, the phenomenon of 'lower pay for fewer hours' coexists with evidence of a growth in employment numbers and confirms the theory on which the analysis is postulated. The evidence will show that the expansion of employment has not led to a dramatic change in real labour unit costs and indeed this is one of the central reasons for the positive expansion of employment in the sector.

## 9. Impact of 'Lower Pay for Fewer Hours' on Employee Remuneration

The analysis shows that adopting the principle of 'lower pay for fewer hours' contributes to changes in the costs of employment which range from 2.75 percent in the second year of the change (2001) to 3 percent in the third year (2002). Yet, it generates a growth in employment of 9.09 percent and 10 percent respectively, or 10 percent and 11.11 percent as the more precise calculations in Table 8 show. However, the comparatively large reduction in working hours, even if matched by an incremental increase in the annual bonus, which employees derive, does not compensate adequately for the loss of earnings, which they would sustain.

The reductions in the length of normal working hours for security workers is taking place within a national milieu of inflation targeting that is being set by the Reserve Bank at below 6 percent per annum. The wage awards required to prevent the nominal wage and salary compensation of security workers from lagging behind receipts obtained a year previously in 2000 can therefore be projected to be either equal or slightly above this figure. We can assume that the wage awards for security workers will therefore hover slightly above the Reserve Bank inflation targets. Assuming that an inflation targets of 5.5 percent will be met, it is not unrealistic to postulate wage growth on a 6.5 percent annual increment. This means that the 6.5 percent award is being simulated at roughly 1 percent above the anticipated rate of inflation. If the period over which the simulations for the reduction in working hours are extended from three years (scenario 1 which is the time-frame specified in Sectoral Determination 3) to four years (scenario 2), the effect on nominal wages is partially mitigated.

The Tables, which follow, simulate the effect of the reduction in working hours using the principle of 'lower pay for fewer hours' which essentially means that the reduction in working hours will contribute to lower absolute pay because the hourly rates of remuneration have remained unchanged.

**Table 9: Nominal Effect on Monthly Salary and Wages of Security Officers of a Shorter Working Week with a 6.5% annual salary increment**

Area 1											
Period of Agreement	Detail	Security Officers					% Change Per annum				
		Grade A	Grade B	Grade C	Grade D	Grade E	Grade A	Grade B	Grade C	Grade D	Grade E
<b>Scenario 1</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 6.5% Increment	3318.52	2723.30	2011.36	1786.69	1667.06	0.27	0.34	0.36	0.33	0.06
Yr 3: 25/2/2002-24/2/2003	45 hr week + 6.5% Increment	3306.79	2715.08	2006.13	1782.54	1668.01	-0.08	0.03	0.10	0.10	0.11
<b>Scenario 2</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 6.5% Increment	3318.52	2723.30	2011.36	1786.69	1667.06	0.27	0.34	0.36	0.33	0.06
Yr 3: 25/2/2002-24/2/2003	48 hr week + 6.5% Increment	3471.96	2850.21	2105.26	1870.31	1749.98	4.91	5.01	5.05	5.02	5.03
Yr 4: 25/2/2003-24/2/2004	45 hr week + 6.5% Increment	3568.42	2927.52	2165.07	1921.97	1797.66	7.82	7.86	8.03	7.93	7.90

In Table 9, the nominal wage effect of the shorter working week is stimulated on an annual salary increment of 6.5 percent. A 6.5 percent annual salary increment was chosen for the simulation because it represents a modest gain of 1 percent above the anticipated inflation rate for employees. It is noticeable that with a 6.5 percent annual salary increment, (scenario one) the nominal wage that employees receive when a 45 hours working week is obtained is almost exactly equivalent to what it was during the first year of the working time reduction when a 55 hour working week prevailed. If the reduction in working hours is extended over an additional year (scenario 2), the nominal wage that the Sectoral Determination allows for in the fourth and final year of the reduction is roughly 8 percent higher than at the start in the first year of the agreement. The simulation however presumes that the hourly rates of remuneration are not affected by the reduction in the level of hours: the simulations merely incorporate the incremental adjustment in the rate of remuneration that occurs naturally through annual collective bargaining.

In Table 10, despite an allowance being made for a 4 percent annual salary increment for security officers, the impact on employee remuneration in the third year when a 45 hour week has been achieved, is a 4.5 percent reduction in nominal wages.

**Table 10: Effect on Monthly Salary and Wages of Security Officers of a Shorter Working Week with a 4% annual salary increment**

Area 1											
Period of Agreement	Detail	Security Officers					% Change Per annum				
		Grade A	Grade B	Grade C	Grade D	Grade E	Grade A	Grade B	Grade C	Grade D	Grade E
<b>Scenario 1</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 4% Increment	3241.28	2657.72	1963.29	1744.46	1633.58	-2.06	-2.08	-2.04	-2.04	-1.95
Yr 3: 25/2/2002-24/2/2003	45 hr week + 4% Increment	3154.35	2587.18	1910.95	1698.26	1591.92	-4.69	-4.68	-4.65	-4.64	-4.45
<b>Scenario 2</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 4% Increment	3241.28	2657.72	1963.29	1744.46	1633.58	-2.06	-2.08	-2.04	-2.04	-1.95
Yr 3: 25/2/2002-24/2/2003	48 hr week + 4% Increment	3311.90	2715.94	2005.37	1781.89	1670.14	0.07	0.06	0.06	0.06	0.24
Yr 4: 25/2/2003-24/2/2004	45 hr week + 4% Increment	3324.19	2724.72	2012.00	1788.24	1677.74	0.44	0.39	0.39	0.42	0.70

This applies to all grades of security workers in all of the five geographical areas (as is shown in the Appendix) to which the Sectoral Determination applies. However, if the period for the implementation of the agreement is extended over an extra year (scenario two), the impact is that the overall nominal remuneration of employees will remain the same as it was at the start of the reduction in working hours.

Table 11 shows that when the phased reduction in working hours for security workers corresponds with an 8 percent annual salary and wage increment, nominal wages under scenario one, will increase by roughly 3 percent. Over the longer period in which the reduction is possible (scenario 2), the nominal wages will increase by up to 12.5 percent in the last year from what it was at the start.

**Table 11: Effect on Monthly Salary and Wages of Security Officers of a Shorter Working Week with a 8% annual salary increment**

Area 1											
Period of Agreement	Detail	Security Officers					% Change Per annum				
		Grade A	Grade B	Grade C	Grade D	Grade E	Grade A	Grade B	Grade C	Grade D	Grade E
<b>Scenario 1</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 8% Increment	3365.90	2761.92	2038.31	1813.64	1696.93	1.70	1.76	1.71	1.84	1.85
Yr 3: 25/2/2002-24/2/2003	45 hr week + 8% Increment	3401.23	2790.44	2059.67	1833.35	1716.10	2.77	2.81	2.77	2.95	3.00
<b>Scenario 2</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 8% Increment	3365.90	2761.92	2038.31	1813.64	1696.93	1.70	1.76	1.71	1.84	1.85
Yr 3: 25/2/2002-24/2/2003	48 hr week + 8% Increment	3571.11	2929.31	2161.43	1923.62	1800.42	7.90	7.93	7.85	8.02	8.06
Yr 4: 25/2/2003-24/2/2004	45 hr week + 8% Increment	3720.37	3051.85	2253.49	2004.86	1877.79	12.41	12.44	12.44	12.58	12.71

Although the reduction in the length of the normal working week from 55 hours 50 in 2001 and again from 50 to 45 in 2002 imposes a cost on employers of approximately 2.75 percent over the succeeding year, it is accompanied by a significant growth in new employment generated. For employers, the pressure however as was illustrated in Table 7 will be on finding appropriate ways of containing inflationary adjustments from employees and trade unions in the sector. But the fact that the wage awards that are agreed to during the forthcoming round of wage bargaining between employers and trade unions are required to match the price changes that have occurred over the year as well as reply to the dialogue that the reduction in hours imposes on the pay packets of workers in the sector, means that there will be added pressure for the trade unions to demand more than employers can afford to pay. Because, while the hourly wage rate of employees remains largely the same, except for adjustments reflecting the annual inflation adjustment, the absolute wage and salary package falls as working hours are reduced. If the simulations are performed on the impact that the adjustment in working hours has on the real wage and salary

compensation of security officers, the quandary for industrial relations stability appears to be even more difficult. Without the mediation of state structures to resolve the impasse, there is no guarantee that employer organisations and worker organisations will see eye to eye on this particular matter.

It appears that a wage increment that is 1 percent above the rate of anticipated inflation is necessary to defend and mitigate the nominal loss of earnings, which the shortening of the working week entails. This applies in particular if the reduction in working hours reduces the aggregate level of wages and salaries. In practice, the principle of 'lower pay for fewer hours' leaves the hourly rate of remuneration unchanged but leads to a reduction in the absolute wage and salary compensations that workers obtain.

## 10. Real Wage Effect of 'Lower Pay for Fewer Hours'

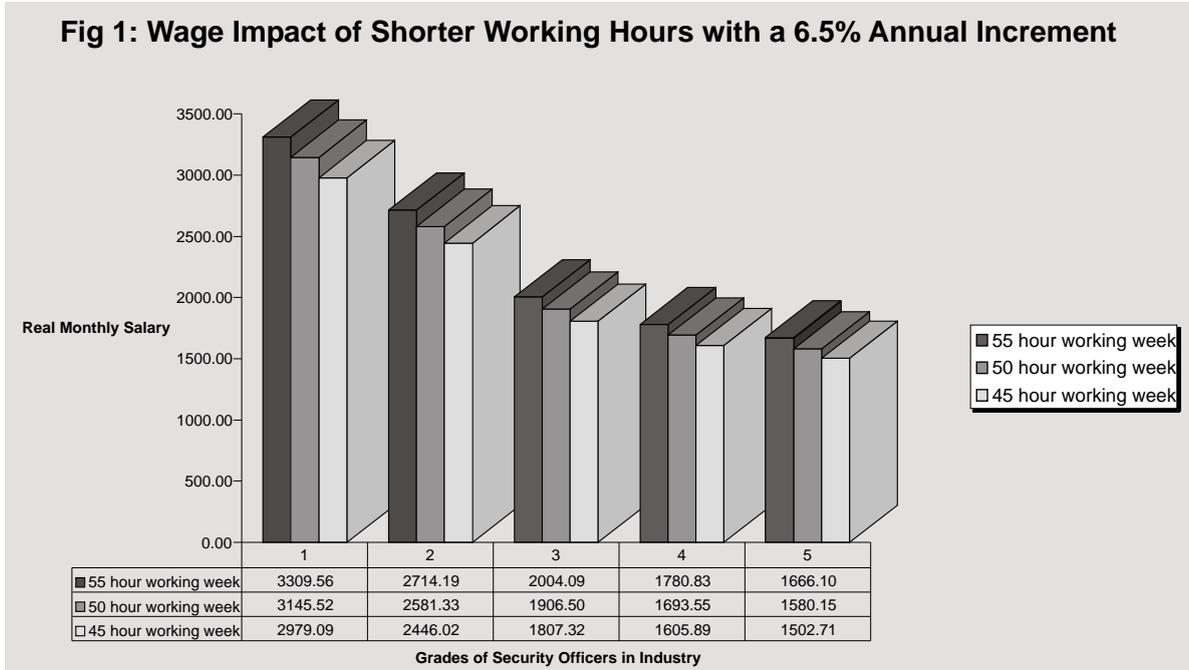
A much clearer picture can be obtained by simulating the real effect of expected price changes on the earnings of employees that result from a reduction in working hours, particularly when the annual size of the reduction in working hours is roughly 10 percent per annum. Now the simulations, which account for inflationary shifts are based on arbitrary amounts. In fact inflation can be either higher or lower than the constant 5.5 percent that we have chosen for the simulation. The point that should be carried across is that even in instances where the aggregate nominal wages and salaries of employees is retained, the effect in real terms of a reduction in working hours leads to a significant decline in the real wage and salary compensation of employees. While real earnings depreciate, it is unlikely for employees to have the illusion about the worth of their earnings simply because their aggregate nominal earnings has remained unchanged. The effect of real prices will certainly shatter this illusion. However as was shown above, the reduction in working hours without dramatic shifts in the costs to employers can lead to a substantial increase in employment. This is due to the positive substitution that exists between the reduction in the length of working hours when the principle of 'lower pay for fewer hours' is adopted and the growth in employment that arises from firms based in the industry. These firms will continue to hire additional staff in order to maintain the services, which they have been performing.

**Table 12: Real Effect on Monthly Salary & Wages of Security Officers of a Shorter Working Week with a 6.5% annual increment**

Area 1		Real Effect of a 5.5% Annual Price Rise					% Real Change Per annum				
Period of Agreement	Detail	Grade A	Grade B	Grade C	Grade D	Grade E	Grade A	Grade B	Grade C	Grade D	Grade E
<b>Scenario 1</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 6.5% Increment	3145.52	2581.33	1906.50	1693.55	1580.15	-4.96	-4.90	-4.87	-4.90	-5.16
Yr 3: 25/2/2002-24/2/2003	45 hr week + 6.5% Increment	2979.09	2446.02	1807.32	1605.89	1502.71	-9.99	-9.88	-9.82	-9.82	-9.81
<b>Scenario 2</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 6.5% Increment	3145.52	2581.33	1906.50	1693.55	1580.15	-4.96	-4.90	-4.87	-4.90	-5.16
Yr 3: 25/2/2002-24/2/2003	48 hr week + 6.5% Increment	3127.89	2567.76	1896.63	1684.96	1576.56	-5.49	-5.40	-5.36	-5.38	-5.37
Yr 4: 25/2/2003-24/2/2004	45 hr week + 6.5% Increment	3063.02	2512.89	1858.43	1649.76	1543.06	-7.45	-7.42	-7.27	-7.36	-7.39

Table 12 therefore shows the real impact on aggregate earnings, which the reduction of working hours has on security workers in the sector. The simulations incorporate a 6.5 percent nominal wage adjustment that is 1 percent above the anticipated level of inflation, which has been simulated at 5.5 percent per annum, but in fact may either be higher or lower. The aggregate real earnings in Table 12 refers to security workers in Area 1 of the Sectoral Determination Agreement. With a 50 hour normal working week, despite obtaining a nominal wage adjustment of 6.5 percent, aggregate real wages for security officers who had previously worked 55 hours will have declined by 5 percent in the second year of the Sectoral Determination. With the same inflation rate and a marginally higher nominal wage and salary adjustment, aggregate earnings under a 45 hours working week will have declined by 10 percent in real terms to what it was during the first year when a 55 hour working week was the norm.

The real effect of this erosion on the aggregate monthly salary of security officers is shown graphically in Figure 1. In Figure 1, the different grades of security officers are depicted from 1 to 5 but these represent all the grades from A at the upper end to E at the lower end of the salary scale.



Similar simulations are shown in Table 13 and 14. In Table 13 the annual wage increment is simulated to be 4.5 percent or 1.5 percent lower than the annual rate of inflation. Under such conditions, the impact on the real earnings of security workers, which the reduction in working hours induces, is significantly more severe. When the length of the working week is reduced from 55 to 50 hours real wages show a decline of approximately 7 percent. On a 45 hour working week the reduction in real remuneration is roughly 14 percent.

**Table 13: Real Effect on Monthly Salary and Wages of Security Officers of a Shorter Working Week with a 4% annual increment**

Area 1		Real Effect of a 5.5% Annual Price Rise					% Real Change Per annum				
Period of Agreement	Detail	Grade A	Grade B	Grade C	Grade D	Grade E	Grade A	Grade B	Grade C	Grade D	Grade E
<b>Scenario 1</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 4% Increment	3072.30	2519.17	1860.94	1653.52	1548.42	-7.17	-7.19	-7.14	-7.15	-7.06
Yr 3: 25/2/2002-24/2/2003	45 hr week + 4% Increment	2841.76	2330.79	1721.58	1529.96	1434.16	-14.13	-14.13	-14.10	-14.09	-13.92
<b>Scenario 2</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 4% Increment	3072.30	2519.17	1860.94	1653.52	1548.42	-7.17	-7.19	-7.14	-7.15	-7.06
Yr 3: 25/2/2002-24/2/2003	48 hr week + 4% Increment	2983.69	2446.79	1806.64	1605.31	1504.63	-9.85	-9.85	-9.85	-9.86	-9.69
Yr 4: 25/2/2003-24/2/2004	45 hr week + 4% Increment	2853.38	2338.82	1727.04	1534.97	1440.12	-13.78	-13.83	-13.82	-13.81	-13.56

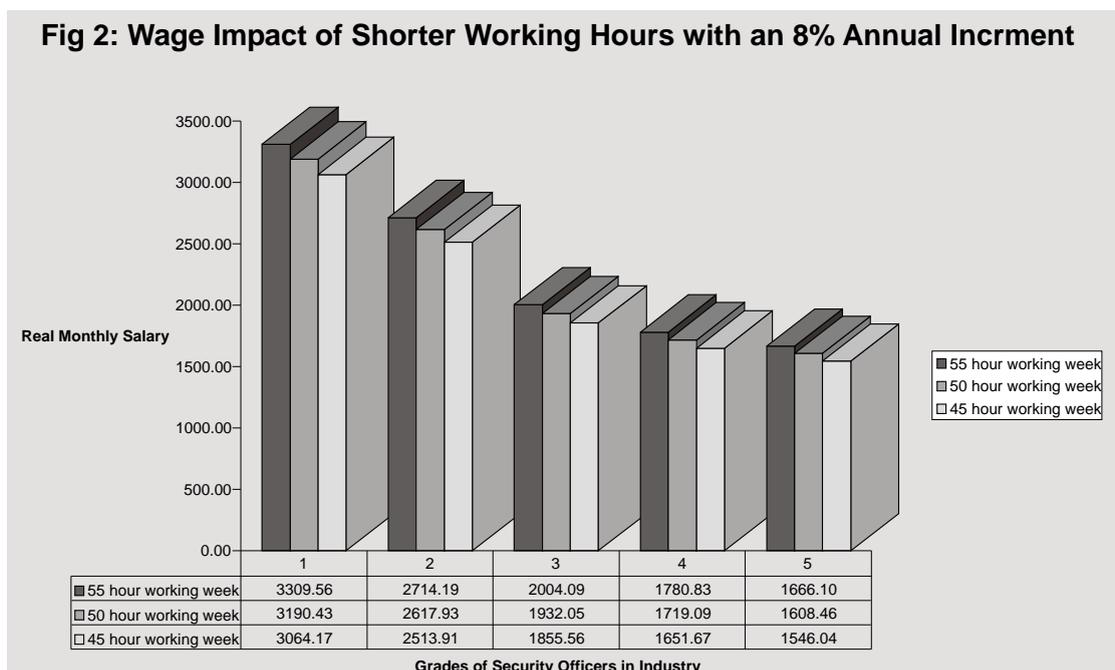
Even with a more generous annual wage increment of 8 percent, an adjustment that is 2.5 percent above the simulated rate of inflation is not an adequate compensation for the defence of real incomes of security officers. When the length of normal working hours in a week is reduced from 55 to 50 hours the real effect on aggregate income shows a reduction of roughly 3.5 percent. When the length of the working week is reduced further from 50 to 45 hours, the impact on real aggregate income for security workers continues to show a decline to roughly 7 percent. Even when the period over which the reduction in normal working hours is implemented over a longer

**Table 14: Real Effect on Monthly Salary and Wages of Security Officers of a Shorter Working Week with a 8% annual increment**

Area 1											
Period of Agreement	Detail	Real Effect of a 5.5% Annual Price Rise					% Real Change Per annum				
		Grade A	Grade B	Grade C	Grade D	Grade E	Grade A	Grade B	Grade C	Grade D	Grade E
<b>Scenario 1</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 6.5% Increment	3190.43	2617.93	1932.05	1719.09	1608.46	-3.60	-3.55	-3.59	-3.47	-3.46
Yr 3: 25/2/2002-24/2/2003	45 hr week + 6.5% Increment	3064.17	2513.91	1855.56	1651.67	1546.04	-7.41	-7.38	-7.41	-7.25	-7.21
<b>Scenario 2</b>											
Yr 1: 25/2/2000-24/2/2001	55 hr week	3309.56	2714.19	2004.09	1780.83	1666.10	N/A	N/A	N/A	N/A	N/A
Yr 2: 25/2/2001-24/2/2002	50 hr week + 6.5% Increment	3190.43	2617.93	1932.05	1719.09	1608.46	-3.60	-3.55	-3.59	-3.47	-3.46
Yr 3: 25/2/2002-24/2/2003	48 hr week + 6.5% Increment	3217.22	2639.02	1947.23	1732.99	1622.00	-2.79	-2.77	-2.84	-2.69	-2.65
Yr 4: 25/2/2003-24/2/2004	45 hr week + 6.5% Increment	3193.45	2619.61	1934.33	1720.91	1611.84	-3.51	-3.48	-3.48	-3.36	-3.26

time frame – 4 years – instead of the 3 years that is allowed in the Sectoral Determination Agreement, the impact shown as scenario 2 in the Table 14 is only partially mitigated.

**Fig 2: Wage Impact of Shorter Working Hours with an 8% Annual Increment**



As was illustrated above in Figure 1 where the salary and wage rates of security workers exhibited substantial erosion even when the annual increment was 6.5 percent, the effect is mitigated but not absent when the annual inflationary increment is simulated at 8 percent. This is illustrated in Figure 2.

A summary of the trends observed in the Tables 12, 13 and 14 and Figures 1 and 2 illustrate the following points:

- The impact on real wage levels of a reduction in working hours where a 6.5 percent annual salary increment prevails shows that real wages will decline by roughly 10 percent when the reduction in working hours extends over the three year cycle (scenario 1). Allowing for an extension of four years results in a real wage (over the remuneration levels in 2000) decline of roughly 7.5 percent.
- Mirroring conditions in Scenario 1 and Scenario 2, effectively implies that the impact on real wages under a 4 percent annual increment is roughly similar. In both instances this results in a negative effect and a real wage decline of 14 percent and 13.5 percent respectively.
- Simulating the effect on real wages with an annual wage increment of 8 percent shows that a decline is recorded that varies from 7.5 percent in Scenario 1 to 3.5 percent in Scenario 2.

The short (three years) and long (four years) term scenarios, which we have deployed for illustrative purposes in Tables 12, 13 and 14, shows that the reduction in working hours as intended by the legislation has dual effects. It reduces the length of working hours to the norms which the majority of employees in other sectors of the economy experience, but the shift to a shorter working week regime, temporarily reduces the aggregate salary and wage earnings of security officers. But the net effect of the shift to shorter working hours has both positive and negative effects. The positive effect or benefit is undoubtedly the attainment of a reduction in the length of working hours. The negative effect or burden is the reduction in the aggregate salary and wage earnings for security officers that results from the reduction in working hours.

## **11. Costs to Employers using the Principle of 'Equal Pay for Fewer Hours'**

Under conditions where the principle of 'equal pay for fewer hours' influences the tabulation of cost to employers that a reduction in working hours imposes, the basis of the calculation will change. The impact on costs to employers will rise proportionately in relation to the decline in the level of working hours because employees would be earning exactly the same amount working fewer hours than they earned before working longer hours. 'Equal pay for fewer hours', means that aggregate employee remuneration remains the same but their hourly rate of remuneration increases.

The above costs however make provision for all shift work and the maximum level of over-time that each security officer can work during a monthly cycle. Excluding annual salary adjustments to employees, the reduction in working hours from 55 to 50 represents a 9.09 percent increase in costs to employers. Similarly, a reduction from 50 to 45 hours results in a 10 percent increase in employment costs. This impact on costs is ameliorated to some extent when the reductions are extended over a longer period.

Table 15 illustrates the impact of a 6.5 percent annual salary adjustment. Combined with a reduction in working hours according to the targets specified in the Sectoral Determination, a 6.5 percent salary adjustment will give rise to a 16 percent annual increase in the costs of employment in the first year. The increase in the cost of employment rises even further to 17 percent in the second year. An attempt to mitigate the rapid escalation in wage and salary costs that follows a reduction in working hours based on the principle of 'equal pay for fewer hours', by attaining the 45 hours target for the level of working hours over four years instead of three only exerts a partial limit on the growth in the costs of employment.

**Table 15: Monthly Costs to Employer (Rands) per Position held on Full-time Operational Cycle (728 hours per month) and the Effects of Introducing a Shorter Working Week combined with a 6.5% Annual Salary Adjustment**

Period of Agreement	Detail	% Change in Costs	Monthly Cost/Full-time Operation	Cost Impact
<b>Scenario 1</b>				
Yr 1: 25/2/2000-24/2/2001	55 Hour Week (Year 1)		4645.03	
Yr 2: 25/2/2001-24/2/2002	50 Hour Week + 6.5% Increment	9.09% + 6.5%	5396.64	16.18%
Yr 3: 25/2/2002-24/2/2003	45 Hour Week + 6.5% Increment	10% + 6.5%	6322.16	17.15%
<b>Scenario 2</b>				
Yr 1: 25/2/2000-24/2/2001	55 Hour Week (Year 1)		4645.03	
Yr 2: 25/2/2001-24/2/2002	50 Hour Week + 6.5% Increment	9.09% + 6.5%	5396.64	16.18%
Yr 3: 25/2/2002-24/2/2003	48 Hour Week + 6.5% Increment	4% + 6.5%	5977.32	10.76%
Yr 4: 25/2/2003-24/2/2004	45 Hour Week + 6.5% Increment	6.25% + 6.5%	6763.71	13.17%

The situation does not alter fundamentally as the comparison simulated on a 4 percent annual wage and salary adjustment in Table 16 shows. The reason for this significant impact on the cost of employment despite the modest annual wage increment that falls below the simulated rate of inflation is because the principle of 'equal pay for fewer hours' automatically results in the cost of employment increasing by the same ratio that the level of working hours is reduced. As is illustrated above, the reduction in working hours from 55 to 50 immediately increase costs by 9.09 percent. When working hours are reduced further from 50 to 45 hours per week, the immediate increase in the costs of employment are measured at 10 percent. Equal pay for fewer hours results in the aggregate salary and wage compensation to employees being the same after the reduction in working hours to what it was before the reduction. Therefore a 4 percent annual wage adjustment will have a 13.45 percent impact on the costs of employment when normal working hours are reduced to 50 hours and a 14.40 percent impact when it is reduced further to 45 hours.

**Table 16: Monthly Costs to Employer (Rands) per Position held on Full-time Operational Cycle (728 hours per month) and the Effects of Introducing a Shorter Working Week combined with a 4% Annual Salary Adjustment**

Period of Agreement	Detail	% Change in Costs	Monthly Cost/Full-time Operation	Cost Impact
<b>Scenario 1</b>				
Yr 1: 25/2/2000-24/2/2001	55 Hour Week (Year 1)		4645.03	
Yr 2: 25/2/2001-24/2/2002	50 Hour Week + 4% Increment	9.09% + 4%	5269.95	13.45%
Yr 3: 25/2/2002-24/2/2003	45 Hour Week + 4% Increment	10% + 4%	6028.82	14.40%
<b>Scenario 2</b>				
Yr 1: 25/2/2000-24/2/2001	55 Hour Week (Year 1)		4645.03	
Yr 2: 25/2/2001-24/2/2002	50 Hour Week + 4% Increment	9.09% + 4%	5269.95	13.45%
Yr 3: 25/2/2002-24/2/2003	48 Hour Week + 4% Increment	4% + 4%	5699.98	8.16%
Yr 4: 25/2/2003-24/2/2004	45 Hour Week + 4% Increment	6.25% + 4%	6298.48	10.50%

**Table 17: Monthly Costs to Employer (Rands) per Position held on Full-time Operational Cycle (728 hours per month) and the Effects of Introducing a Shorter Working Week combined with a 8% Annual Salary Adjustment**

Period of Agreement	Detail	% Change in Costs	Monthly Cost/Full-time Operation	Cost Impact
<b>Scenario 1</b>				
Yr 1: 25/2/2000-24/2/2001	55 Hour Week (Year 1)		4645.03	
Yr 2: 25/2/2001-24/2/2002	50 Hour Week + 8% Increment	9.09% + 8%	5472.64	17.82%
Yr 3: 25/2/2002-24/2/2003	45 Hour Week + 8% Increment	10% + 8%	6501.5	18.80%
<b>Scenario 2</b>				
Yr 1: 25/2/2000-24/2/2001	55 Hour Week (Year 1)		4645.03	
Yr 2: 25/2/2001-24/2/2002	50 Hour Week + 8% Increment	9.09% + 8%	5472.64	17.82%
Yr 3: 25/2/2002-24/2/2003	48 Hour Week + 8% Increment	4% + 8%	6146.87	12.32%
Yr 4: 25/2/2003-24/2/2004	45 Hour Week + 8% Increment	6.25% + 8%	7053.53	14.75%

Finally Table 17 highlights the cost impact for employers, which result from a shorter working week and an 8 percent adjustment in salary over the previous rate. It can be seen that the 8 percent adjustment merely aggravates the high escalation in employment costs associated with the principle of 'equal pay for fewer hours'. The high costs which this would impose on firms will serve as a major barrier to profitability and in the context of the competitive nature of the industry will serve as a major reason for encouraging firms to scale down their operations or exit from the industry altogether.

**Table 18: Cost to Employers of Reduced Working Hours Combined with Annual Salary Adjustments (Adjustments calculated on principle of 'equal pay for fewer hours')**

Period of Agreement	Detail	Cost Impact on 4% Salary Increment	Cost Impact on 6.5% Salary Increment	Cost Impact on 8% Salary Increment
<b>Scenario 1</b>				
Yr 1: 25/2/2000-24/2/2001	55 Hour Week (Year 1)			
Yr 2: 25/2/2001-24/2/2002	50 Hour Week + Salary Increment	13.45%	16.18%	17.82%
Yr 3: 25/2/2002-24/2/2003	45 Hour Week + Salary Increment	14.40%	17.15%	18.80%
<b>Scenario 2</b>				
Yr 1: 25/2/2000-24/2/2001	55 Hour Week (Year 1)			
Yr 2: 25/2/2001-24/2/2002	50 Hour Week + Salary Increment	13.45%	16.18%	17.82%
Yr 3: 25/2/2002-24/2/2003	48 Hour Week + Increment Increment	8.16%	10.76%	12.32%
Yr 4: 25/2/2003-24/2/2004	45 Hour Week + Increment Increment	10.50%	13.17%	14.75%

Table 18 consolidates the results illustrated in Tables 15, 16 and 17. Naturally, employers will be inclined to maintain annual salary adjustments for employees at the lowest level to accommodate the costs of complying to shorter normal working hours for security officers. But even adherence to an annual salary adjustment of 4 percent will contribute to annual employment cost rises that exceed 13 percent and this is more than double the simulated inflation rate of 5.5 percent which closely mirrors the targets set by the Reserve Bank. Unless the burden of the escalation in the costs of employment are shifted to consumers of security services, which is most unlikely in the competitive environment of the sector, the burden borne by employers will lead to a cut-back in services and probably even greater pressure on security officers to increase productivity.

## 12. Employment Losses as a Result of the Principle of 'Equal Pay for Fewer Hours'

Using the short-run and long-run wage employment elasticities which have been calculated for the South African economy by the World Bank (Fallon & Lucas), simulations of the increments of real wages to job losses can be derived for the short-run and the long run. While we do not have precise values of the price demand elasticity for the Security sector, the World Bank data is the best available measure for South Africa. Except for Black employees in Agriculture, these elasticities cover formal sector employment for the period 1961-1993. The average estimate for long-run aggregate wage-employment elasticity for the period is -0.71 and the average estimate for the short-run (impact) elasticity is -0.156. The comparative static nature of the exercise limits the simulation to the first round disemployment effects of a real wage increase (in this case it is a real increase in the unit costs of labour). This means that the disemployment effects can only be simulated for the first phase of the reduction in working hours, which is from 55 hours to 50 hours. But the simulation compels a realistic assessment to be made of the principle of 'equal pay for fewer hours', because the disemployment effects in the short-run are real and these reverberate towards more damaging effects in the long run as additional jobs are lost. The cost of the reduction in working hours to employers, and the price sensitivity of the users of security services to price shocks will lead to firms that are not able to extract the necessary productivity gains to neutralise the real increase in costs becoming uncompetitive. As a result such firms will begin to lose contracts and will therefore be required to retrench staff. In instances where the adjustments in staff complements are not adequate to raise the operating margins, firms will become unprofitable and will hence be required to exit the sector.

**Table 19: Simulated Short-run Employment Effect of 'Equal Pay for Fewer Hours'**

Wage Increment	Number of Security Workers	Real % Increase in Wage Bill	Short-run Elasticity	Elasticity Factor	Job Losses	% of Total Employment
4%	188383	13.45%-5.5% = 7.95%	0.156	1.24	2336	1.24
6.50%	188383	16.18%-5.5% = 10.68%	0.156	1.66	3127	1.66
8%	188383	17.82% - 5.5% = 12.32%	0.156	1.92	3617	1.92

So therefore the attempt to preserve the monthly wage and salary earnings to what it was before the reduction in normal working hours so that it coexists with an incremental wage increase of either 4 percent, 6.5 percent or 8 percent is shown in Table 19. Using the rate of inflation as a proxy of the real increase in wages that are due to the combined effect of the reduction in working hours and the wage increment which will be negotiated at the annual pay round, will lead to short-term nominal price shocks of 13.45 percent, 16.18 percent and 17.82 percent respectively. The full percentage value of the increase has been deflated by an estimate of the rate of inflation in order to derive the real percentage increase in the costs of the wage bill to employers. Using the short-run wage-employment point elasticity of -0.156 on a prevailing employment level for the sector shows that 2336 jobs are lost when a 4 percent wage increment follows the principle of 'equal pay for fewer hours' which defends the aggregate wage and salary compensation of employees. Under the same principles, a wage increment of 6.5 percent will lead to the employment loss of 3127 jobs among security officers in the short-term, accounting for 1.66 percent of the current labour force. This implies that a 6.5 percent wage increment with the associated conditions that we have discussed will lead to aggregate short-term employment declining from 188383 security officers to 185256. Adhering to the principle of 'equal pay for fewer hours', means that for every increase in the wage increment, an effect consistent with the elasticity factor will lead to disemployment effects which will finally resonate on the aggregate level of total employment.

**Table 20: Simulated Long-run Employment Effect of 'Equal Pay for Fewer Hours'**

Wage Increment	Number of Security Workers	Real % Increase in Wage Bill	Short-run Elasticity	Elasticity Factor	Job Losses	% of Total Employment
4%	188383	13.45%-5.5% = 7.95%	0.71	5.64	10625	5.64
6.50%	188383	16.18%-5.5% = 10.68%	0.71	7.58	14279	7.58
8%	188383	17.82% - 5.5% = 12.32%	0.71	8.75	16484	8.75

By extending the simulation of the disemployment effects to the long-run using the estimated wage-employment elasticity of -0.71 which is shown in Table 20, the disemployment effects of the changes in real unit costs will be more than four times more severe in the long-run than over the short-run. What appears to be a modest 4 percent wage increment, is actually significantly large in real terms under the 'equal pay for fewer hours' principle and in fact the higher long run elasticity contributes to a higher elasticity factor giving rise to larger job losses. At 4 percent therefore, 10625 jobs will be lost in the long-run and this would lead to a shrinkage of employment for security officers from an aggregate of 188383 security officers to an aggregate of 177858. At 6.5 percent the disemployment effects will be even higher and 14279 job losses will occur which accounts for 7.58 percent of aggregate employment. Similarly the disemployment effects in which the position of 'equal pay for fewer hours' is upheld and coincides with an additional 8 percent annual wage increment will destroy 8.75 percent of the available jobs of security workers.

### 13. Lessons for Working Time Reductions

The experience of systematically reducing working hours in the South African security sector highlights special problems that distinguishes it from similar processes that have occurred in developed countries, particularly those in Western Europe. Using a classification adumbrated by White (1987), the level of working hours for security workers prior to the process of reduction can be characterised as excessive. As was shown above, at least 60 percent of all security officers in the sector worked 60 hours or longer per week.

From a detached position, there appears to have been a range of contextual conditions that limited and deflected the initial objectives to achieving the reduction in working hours without adverse or deleterious effects being borne by either workers or employers. The relatively tight time frame set for the process of equilibrating the regime in working hours to that specified in the Basic Conditions of Employment Act appears to have had unintended effects. The cycle of complementary effects operated in tandem with shifting the burden of the reduction onto the segment of the labour force that was supposed to celebrate the good intentions of the process. At the crux of the matter is the difficulty of reconciling labour market rigidities around the compensation of employees on the one side so that it does not coincide with resistance by employers against bearing any responsibility for the cost burden. There is the danger that workers can resist a potential decline in wages at the same time that employers resist the increase in costs. The rigidity is one of incompatible interest but with actions that are complementary. The complementary character of the process is evident in the concept of 'lower pay for fewer hours' dictating the principle by which the reduction in working hours is being achieved. A corollary to achieving a reduction in working hours through the above, is the principle of 'equal pay for fewer hours'. Essentially this would have implied that the onus for financing the reduction in working hours would have been borne by employers. Had this been the case, a reduction in working hours would have been obtained without affecting the wage or salary packets of workers. It would have resulted in the hourly rate of pay increasing in proportion to the reduction in the level of working hours. A middle ground, which could have been construed as being absolutely fair, would have been a sharing of the burden of working hours reduction between the employers and the workers. This appears to have happened rather implicitly in Sectoral Determination 3 where the 'hours-dependent non-wage expenditure' in the form of bonuses was

allowed to fluctuate upwards as a compensation to the observable fall in wages and salaries which the reduction entailed. Surprisingly, apart from the need to reduce the excessive long working hours of security workers, no other motivation or rationale appears to have prefigured the reduction in working hours: neither the accumulated benefits from productivity, nor the employment inducing effects were strenuously advocated.

It is obviously clear that the level of working hours for security workers was excessive. However, in the context of the significant reduction of earnings that security workers are exposed to, through the reduction in working hours, the level of working time reduction can be construed as being fairly drastic. One has to remember that the Basic Conditions of Employment Act imposes limits to which reduced working time can be substituted for higher remuneration from the working of overtime. In fact the simulations that I have used in this paper is based on the absolutely maximum level of overtime hours that security workers can work. In instances where the reduction in working hours has occurred through adherence to the concept of 'equal pay for fewer hours', the time-frame for the reductions have generally been longer and the level of the reduction in working hours has been a lot more modest.

Perhaps an explanation for the generally uncontested principle of the reduction in working hours being expressed through the notion of 'lower pay for fewer hours' is to be found in the strength and composition of the agents in the sector. The relatively low barriers to entry as was noted in the evidence above, has resulted in a highly competitive industry with low profit margins to firms. A similar trait characterises the nature of trade union organisation in the sector. Union competition for membership appears to be sharply concentrated in the large urban centres. These features have tended to weaken the degree of concentration and monopolisation among employers and unions alike. The impact of this is significantly more detrimental to the interests of employees. Hence the rather skewed orientation in the principles by which the reduction in working hours is being secured. It is therefore unlikely for the strategy of the reduction in working hours to have been attained solely through the powers and initiatives of either employers and employer organisations, or the organised workers in the sector. The accolades for this sterling achievement are due to the Ministry of Labour and its officials.

## 14. Summary and Concluding Remarks

The adjustments in working hours and the shift in the length of the working week for security officers from 60 hours to 45 hours in four years represents a very drastic decline in working hours. Since the agreement makes provision for a fixed amount of hours by which the normal working week is shortened per annum (5 hours), over a period of four years (2000-2003), it has the effect of increasing the proportionate size in the yearly reduction. At a minimum, assuming that no salary increments are awarded, the impact on the real costs to employers will be rather small particularly if the conception on which the reduction in working hours takes place is implemented according to the principle of lower pay for fewer hours. Not only will the effects on the costs to employers remain within modest limits but the reduction in working hours will create employment to a ratio that corresponds to the level of the reduction in working hours. While employment gains will be a positive benefit, the impact on the real living standards of workers will be negative. The wage adjustment that has to be made to compensate for this loss is roughly in the region of 11.5 percent. But a 11.5 percent annual wage adjustment will not generate the degree of employment which our simulations have shown to be possible. Indeed, the significant reduction in the level of working hours (5 hours each year) will induce employees to demand compensation for their loss of earnings and this can only be achieved through a compensating increase in wages. Employers may argue that this imposes an unfair burden on their capacity to engage in profitable economic activities.

<sup>1</sup> See Paul Blyton, *Changes in working time: an international review* (London: Croom Helm, 1985) for European trends and John Owen, *Working hours: an economic analysis* (Lexington, Massachusetts: Lexington Books, 1979) for American trends.

While it is recognised that the reduction in working hours signifies a massive benefit to employees who work long hours, it should be noted that this recognition can only be appreciated by employees after they have understood the significance of the achievement. Unless they do so, they might resort to claims for a higher increment in their annual remuneration: and they will justify these claims because of a depreciation of their monthly earnings. It is for this reason that employees may advance wage claims that are above the changes in the price level for the period and duration in which the reduction in working hours are implemented. The real erosion in wages which security workers on the longer working hour schedules will experience, can lead to a difficult and conflictual industrial relations climate. A strategy to contain such a development would be contained in proposals that demonstrate how security officers can acquire promotion from lower to higher grades and where possible during the time period in which a shorter working hour regime is being implemented. Higher grades have a higher rate of compensation but are determined by qualifications recognised and controlled within the Security Sector.

On the other hand adherence to the conception of 'equal pay for fewer hours', as the justification for securing the historical value of wages and salaries and compensating this with the normal annual wage increment that corresponds or improves remuneration rates beyond the level of inflation will have disemployment effects. At higher wage increments the disemployment effects will be greater. The principle of 'equal pay for fewer hours' actually implies that the hourly wage rate that prevailed before the adjustment would in fact increase after the adjustment so that the aggregate wage remuneration adjustment is maintained to correspond with what it was before.

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