

HUMAN RESOURCE MANAGEMENT IN SOUTH AFRICA: A MACRO-ECONOMIC AUDIT

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ABSTRACT

There should be no doubt in the minds of important economic decision-makers that the widely reported lack of international competitiveness of the South African economy must be addressed as a matter of urgency. Low levels of labour productivity are often listed as one of the major reasons for the lack of international competitiveness. This paper attempts to research the macro aspects of human resource management in South Africa as an essential element of the current debate on the level of competitiveness. The findings of the research clearly indicate a need for the formulation and implementation of a more effective and cohesive strategy on macro human resource management.

OPSOMMING

Daar is geen twyfel by belangrike ekonomiese besluitnemers dat die gebrek aan internasionale mededingendheid van die Suid Afrikaanse ekonomie, gesien teen die agtergrond van die wye publisiteit wat dit tans geniet, dringend aandag moet ontvang. Lae produktiwiteitsvlakke word gewoonlik uitgewys as een van die vernaamste bydraende faktore tot die gebrek aan internasionale mededingendheid. Die artikel poog om die stand van makro menslike hulpbronnebestuur as 'n verneme element van die huidige debat oor mededingendheid, na te vors. Die bevindinge van die navorsing toon baie duidelik 'n behoefte aan die formulering en implementering van 'n meer doelmatige en samehangende strategie vir makro menslike hulpbronnebestuur.

INTRODUCTION

The aim of this paper is to present evidence on the state of human resource management in South Africa as an essential element of the current debate on the level of international competitiveness of our economy.

It is true to state that the level of international competitiveness of the South African economy will, to a large extent, be determined by the quality of its human resource management in the next few years. This paper attempts to present important aspects of human resource management in our country with reference to the impact that it might have on the international competitive position of the economy.

QUANTITY AND SKILLS OF HUMAN RESOURCES

South Africa has a large pool of human resources. The country's (1995) population measures around 41 million (mid-year estimates including Transkei, Bophuthatswana, Venda and Ciskei) (Central Statistical Service, Demographic Statistics, 1995) which is the 29th largest country-population in the world (United Nations, 1995). According to estimates (Central Statistical Service, Demographic Statistics, 1995) about 37 percent or 15 million of the total population are economically active. However, the formal economy has not been able to employ the potential workforce and formal unemployment is estimated to be as high as 20 percent to 32 percent (International Labour Organisation, 1996, p. 104) depending on the different definitions of unemployment. Despite this, every sector reports a shortage of skilled labour.

South Africa's secondary school enrolment of 69 percent of all pupils compares well to that of other developing countries (see Table 1), but is still significantly lower than the closer to 100 percent of the newly industrialised and developed countries (IMD, 1996, p. 560).

TABLE 1: SELECTIVE EDUCATIONAL SYSTEM COMPARISONS

Country	Secondary school enrolment	Higher education enrolment	Pupil-teacher ratio (1st level)	Public expenditure on education (US\$ per capita)	Illiteracy (Adult over 15 years) % of population
South Africa	69%	14%	37	208	18%
Australia	82%	40%	17	914	1%
Brazil	39%	12%	23	96	17%
Canada	100%	99%	17	1 456	2%
Mexico	55%	14%	29	231	13%
Malaysia	58%	7%	20	165	16%
Korea	90%	42%	31	294	2%
Taiwan	95%	34%	25	654	7%
Germany	97%	36%	16	810	1%
Japan	97%	32%	20	1 275	0%
USA	90%	76%	14	1 172	0%

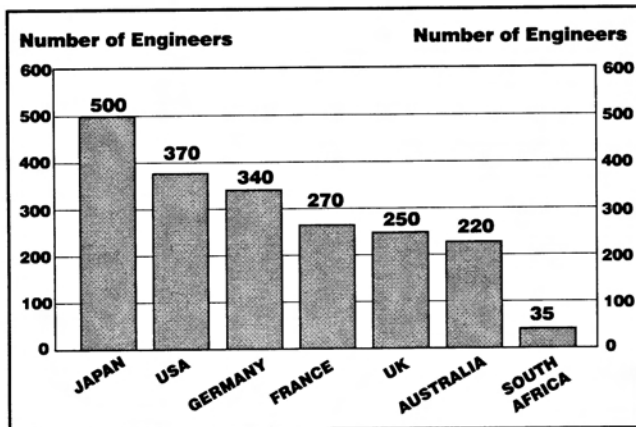
Source: Compiled from IMD, 1996: 560-565

In 1992 only 14 percent of the population between the ages of 20-24 enrolled in higher education, including vocational schools, adult education programmes, two-year community colleges and distant education centres (IMD, 1996, p. 561). This is similar to the percentages achieved in Mexico and Brazil, and better than that of Indonesia, Malaysia, India and China. From Table 1 it is apparent that South Africa's level of higher education enrolment is significantly lower than that of the leading economies, such as the United States (USA), France, Korea, Singapore, Germany, Taiwan and Japan. Canada, New

Zealand and Australia also outperformed South Africa. Similar trends emerge when pupil to teacher ratios, public expenditure per capita and illiteracy rates are compared (see Table 1). In addition, the ISP (Joffe, Kaplan, Kaplisky and Lewis, 1995, p.85) studies have shown that South African firms spend only one percent of their payroll on training, while the equivalent figure in the Organisation for Economic Co-operation and Development (OECD) countries is four to seven percent. Investment in education has been skewed towards the tertiary level (within this sector the ratio between university and technikon students was heavily skewed towards the universities). Another factor inhibiting the development of appropriate skills is the low and declining proportion of matriculants that pass mathematics and science. Less than two percent of African matriculants passed mathematics in 1990 (Joffe *et al.*, 1995, p.85).

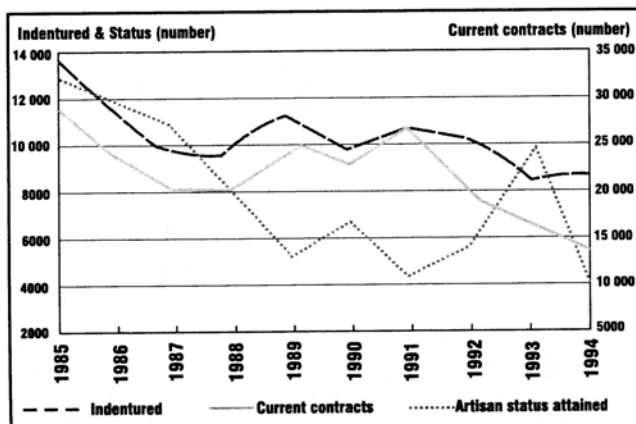
South Africa spends more than twenty percent of the consolidated general government's total expenditure budget on education (South African Reserve Bank, September 1994, S-67), compared to a world average of about 14 percent (Department of National Education, 1993, p.59). However, the level of compulsory education that the majority of people receive is inferior to that of the country's major trading partners. The educational and training systems in general do not meet the needs of a competitive economy. Only about eighteen percent of all degrees and fifty percent of all diplomas and certificates awarded in South Africa were directly employable in the manufacturing industry (Department of National

**FIGURE 1:
GRADUATING ENGINEERS PER MILLION OF
THE POPULATION, 1993**



Source: National Productivity Institute, 1994, p.11.

**FIGURE 2:
APPRENTICES - CURRENT CONTRACTS,
INDENTURED AND ARTISAN STATUS
ATTAINED IN SOUTH AFRICA, 1985-1994**



Source: National Manpower Commission, 1995

Education, December 1993, p.41). The training and education system in South Africa does not deliver sufficiently in the important skills, such as engineers and technicians, that are required to transform an agriculture and mining based economy into an economy that competes in sophisticated manufacturing areas.

According to the World Bank (1994) out of every 10 000 South African children who enter the school system, 1 300 will reach matriculation, 113 will pass, 27 will qualify for university acceptance and 1 will qualify for university acceptance in either mathematics or science (Wefa, August 1996, p.27). This is illustrated by the country's graduating engineers per million of the population, which is significantly lower than that of the developed countries (see Figure 1).

TABLE 2: NUMBER OF MIGRANTS BY OCCUPATION - 1995

	Emigrants	Immigrants	(Loss)/Gain
Total - economically active	4 526	1 762	(2 764)
Professional, semi-professional and technical	1 680	798	(882)
- Engineers	319	178	(141)
- Medical and dental	85	77	(8)
- Education	314	127	(187)
- Accountant	234	35	(199)
- Other	728	381	(347)
Managerial, executive and administrative	664	374	(290)
Clerical and sales	861	250	(611)
Transport, delivery and communications	41	7	(34)
Service occupations	102	79	(23)
Farming and related occupations	26	5	(21)
Artisans, apprentice and related	319	103	(216)
Production foreman, supervisor, miner, quarry worker, operator, production & related	40	58	18
Occupation unspecified and n.e.c.	793	88	(705)
Not economically active	4 199	3 302	(897)
Grand Total	8 725	6 272	(2 453)

Source: Central Statistical Service, Statistical release P0351, pp. 12-13.

An indication of a potential shortage of design and engineering skills is further accentuated by the marked decline in the number of apprentices trained in South Africa since 1985 (see Figure 2). Likewise, the electronics industry cluster study found that, in the past, the defence industry was a major technological driver for the industry as a whole, as well as being a training ground for highly qualified staff. With the reduction in defence spending, coupled with a progressive 'brain-drain' of the best (and most mobile) talent, this technological base is gradually being undermined. This, if not rectified, is a major threat to the electronics industry in South Africa. The exodus of talent, for example, is gathering pace with a continuing failure to regenerate lost skills (Arthur D. Little/BMI-Technology, 1996, p.21). South Africa displays a very poor ability to keep its limited number of highly skilled people. During 1995, as an

example, the country suffered a net loss of 2764 in its economically active population. A significant portion of this was due to the emigration of professional and technically skilled people (see Table 2).

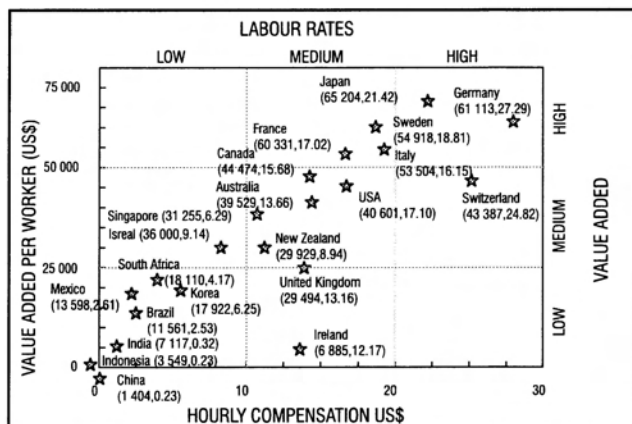
With South Africa now being part of the international trading community and given the gradual reduction in import protection, many domestic companies are viewing export markets as their major opportunity. However, senior management in many South African companies are not experienced in international business (IMD, 1996, p.518; World Economic Forum, 1996, p.223) and are insufficiently skilled to be able to properly formulate and to understand their target markets (Arthur D. Little and BMI-Techknowledge, 1996, p.15). Other severe skill shortages that emerged are, for example, in the areas of Radio Frequency (RF) technology and 'product' engineers capable of making the compromise between mechanical and electronic design. As with most countries, South Africa also experiences a shortage of software designers and engineers, especially for embedded applications (Arthur D. Little and BMI-Techknowledge, 1996, p.19). Likewise, in footwear, there are only five properly qualified footwear technologists in South Africa, of which four are in retail. Furthermore, there is an apparent lack of footwear technical skills in the factories (National Productivity Institute and LMC International, 1996, p.50). According to an International Labour Organisation (ILO) country review of South Africa, over the 1983 to 1993 period the largest vacancy rates were experienced in the professional, semi-professional and technical occupations, followed by artisans and apprentices (ILO, 1996, p.79).

LABOUR COST

On average, manufacturing labour rates (total hourly compensation – wage plus supplementary benefits) in South Africa are lower than that in developed and newly industrialised countries (see Figure 3). South Africa's average compensation level in manufacturing of just more than US\$4 per hour places it in the low wage country category. However, the country's average manufacturing wage rate is substantially higher than that of Indonesia, India and China, and even higher than that of Brazil and Mexico, but lower than that of Korea and Singapore. In accordance with its low wage position in manufacturing, South Africa also counted among the low manufacturing- value-added-per-worker group of countries (see Figure 3).

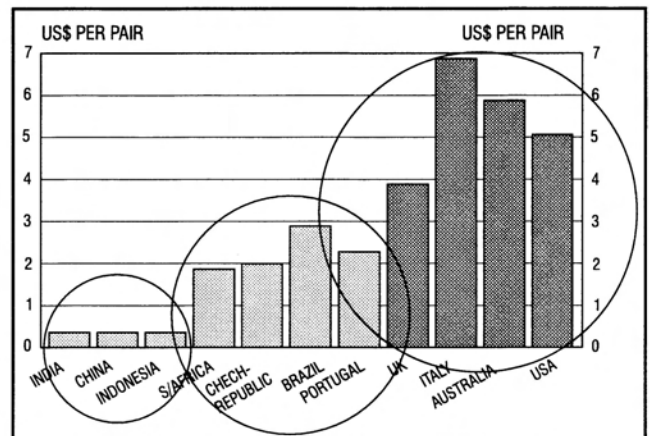
Value added per worker gives some indication of the efficiency with which resources are being employed. Higher value added per worker indicates that a combination of higher wages and higher margins can, on average, be charged for products

FIGURE 3: EARNINGS IN MANUFACTURING (1994) AND VALUE ADDED IN MANUFACTURING, 1992, COMPARISON ACROSS COUNTRIES



Source: Compiled from IMD, 1996, p. 498 & 501.

FIGURE 4: LABOUR COST IN THE FOOTWEAR INDUSTRY (MEN'S SHOES) – 1996



Source: National Productivity Institute and LMC International, 1996, p. 33.

manufactured in a particular country. This position is often the result of more efficient production processes and differentiated product offerings that can demand higher prices. Nations that frequent the high value added and high hourly compensation position, such as Germany and Japan, are in terms of manufacturing, experiencing the most optimal level of wealth creation. Therefore, most countries will attempt to move upwards and to the right of the grids indicated in Figure 3. For South Africa, over the short to medium term, that implies more directly competing with Singapore, Korea, Israel, New Zealand, the United Kingdom, Australia and Canada in the low-wage/medium-value added and the medium-wage/medium-value added categories. This will require a significant upgrading of human resources over a broad front of manufacturing, marketing and service skills.

On a cluster level similar labour rates and productivity findings emerged. In footwear, a relatively labour intensive industry, South Africa's labour costs (wage rates and productivity) compares favourably to that of the high and medium-labour cost countries indicated in Figure 4.

However, imports from the low cost footwear producers are a significant threat to the continued existence of the domestic footwear industry.

The average labour rate per hour in a South African motor vehicle assembly plant in 1994 was US\$5,60 compared to US\$6,00 in Mexico and US\$38,00 in the United States (Monitor Company, The Motor Vehicle Cluster, 1994). Similarly in metal products (fasteners) South Africa's average wage in 1994 was about US\$4 per hour, compared to about US\$16 in the United States, and US\$15 in both Italy and Germany (Monitor Company, The Metal Products Cluster, 1994). In the carbon steel automotive components bench marking exercise (Industrial Development Corporation, June 1996) South Africa's wages (in Rand per week) in 1996 ranged between R530 to R678 compared to R1480 or R1760 in the United States depending on the exchange rate.

The cost of development engineers in South Africa was found to be very favourable, undercutting most European costs by a significant margin. Indications are that South African costs are at about 25 percent of German, 35 percent of the French and around 50 percent of British costs (Arthur D. Little and BMI-Techknowledge, 1996, p.20), suggesting that South Africa also potentially has an advantage in some of the more sophisticated skills.

STANDARD WORKING HOURS AND WORK ETHIC

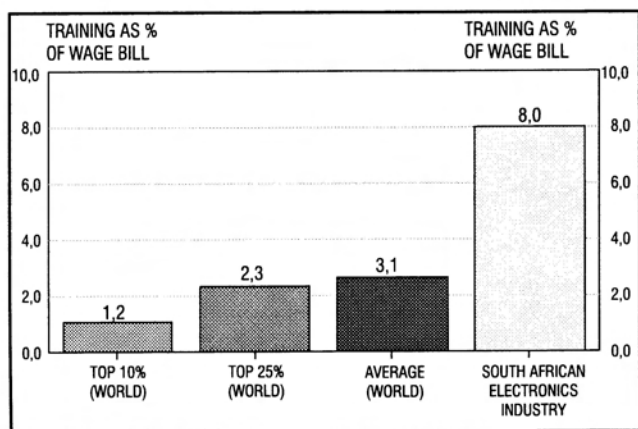
The number of hours worked in South Africa compares favourably with that in other countries. The 45 working hours per week in manufacturing activities in South Africa was higher than that in the developed economies, which ranged between 31 hours to about 44 hours. Similarly, South Africa's 1 999 official working hours per year (1994) is higher than that of the developed economies, but lower than most of the newly industrialised and developing economies included in the World Competitiveness Yearbook (IMD, 1996, p.556).

During the 1992 to 1994 period South Africa lost more than 50 working days per 1 000 inhabitants due to industrial disputes. This is much higher than the zero days lost in Singapore, the 0,07 days lost in Colombia, and the 0,51 in Malaysia. In fact, of the 42 countries measured only six lost more working days per 1 000 inhabitants than South Africa. These countries are Italy (56), Canada (61), Spain (111), Iceland (122), Israel (136), Greece (164) and Argentina (222) (IMD, 1996, p.519). In addition, the work culture in South Africa, as portrayed by worker motivation and dedication was the weakest of the countries included in the World Competitiveness Yearbook (Imp, 1996, pp.578 - 579 and 581). Similarly, absenteeism levels in South Africa are high and disruptive to the production process. For example, in the South African electronics industry usual levels of absenteeism per category is significantly higher than world averages (see Figure 5). A similar trend was apparent in the other clusters studied.

It is the view of local plant managers that a serious lack of commitment characterises the South African labour force. This attitude reflects the interplay of many long-term and short-term factors such as racial division in the past, motivation, culture, management systems, nature of work and very individual and sensitive issues such as personal value systems and life objectives. Examples where cultures have positively influenced work attitudes are Japan, the Republic of Korea, Hong Kong and Singapore. In these countries, not only are the national and social cultures conducive to positive work attitudes, but so are the organisational cultures in the workplace (Industrial Development Corporation, June 1996, p.30).

From the late 1970's unionisation grew dramatically in South Africa with trade union membership increasing from 700 000 to 2,9 million in 1992. The ILO country review on South Africa (ILO, 1996, p.150) reported that at the end of 1995 total union membership was estimated at 3,3 million with 2,7 million workers belonging to registered unions and 600 000 belonging to unregistered unions. The total membership of the 1997

**FIGURE 5:
USUAL LEVELS OF ABSENTEEISM PER
CATEGORY – ELECTRONICS SECTOR**



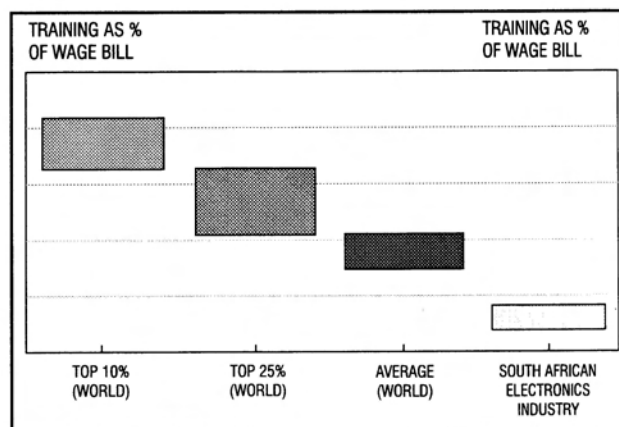
Source: Arthur D. Little and BMI-Techknowledge, 1996: p. 118

registered trade unions form approximately 20,4 percent of the economically active population (Slabbert and de Villiers, 1997, p.42). Widespread unionisation has not prevented many leading European industries from competing successfully. Japan and most European countries have benefited from more productive relations between labour and management (Porter, M.E. and The Monitor Company, 1991, p.183). The adversarial nature of industrial relations in South Africa reflects a seemingly inability of labour and management to identify common ground. Each has traditionally defined its interests in narrow terms and displayed limited enthusiasm for real partnerships in the workplace. Understandably this will make it difficult to build consensus in the face of competitive threats.

UPGRADING AND SPECIALISATION OF HUMAN RESOURCES

Firms in South Africa have been reluctant to invest in the upgrading and maintenance of their human resources. According to the World Competitiveness Yearbook (IMD, 1996, p.568) companies in South Africa neglected training their employees. In this regard South Africa was rated 39th out of 46 countries. In support of this, benchmarking in the South African electronics industry indicate that South African firms spend between 0,5 and 1,5 percent of their wage bills on training, compared to a world average in the electronics industry of between three and four percent, while the top ten electronics companies spend between 6,5 and 8,5 percent of their wage bill on training (see Figure 6). During company interviews for the cluster studies the tendency by competitors to poach trained workers, as well as the removal of government incentives for training, were often forwarded as the reasons for the low spending on training by South African firms.

**FIGURE 6:
TRAINING IN THE ELECTRONICS INDUSTRY AS
A PERCENTAGE OF THE WAGE BILL**



Source: Arthur D. Little and BMI-Techknowledge, 1996, p. 118.

CONCLUSION

Various international competitive studies have clearly shown that the South African economy is not a competitive one and that it is lagging behind the economies of its major trading partners and the major portion of other developing economies. A careful scrutiny of these studies revealed that low levels of labour productivity are viewed as one of the major reasons why the South African economy is not internationally competitive. It is thus becoming more and more imperative to identify those aspects of human resource management that can address the problematic lack of labour productivity in our economy.

This particular paper dealt specifically with certain important macro-based issues of human resource management in our

economy. Issues that were dealt with in the paper are a) the quantity and skills of our human resources, b) labour cost, c) standard working hours, work ethics and d) the upgrading and specialisation of human resources. It was not the intention of the paper to address the micro detail of these issues.

It was obvious from the results of the research that all of these issues need to be addressed in the search for higher levels of labour productivity (especially in the manufacturing industry of our economy). It is the view of the author that major micro-based research needs to be conducted on every single issue identified in the paper. It would only then be possible to construct and implement a realistic and cohesive strategy on the improvement of labour productivity in our economy.

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