An Industrial Strategy for the South African Footwear Subsector

Faizel Ismail

Report submitted to the
Industrial Strategy Project (ISP)
March 1993

TABLE OF CONTENTS

Acknowledgments

This study was made possible by the generous assistance and time that was made available to me by all the people listed in Annexure A. I would like to thank them for fitting me in their schedules during a very busy period of the year. Special mention must be made of Sid Cohn, whose generous assistance and keen interest in the study has been a source of great encouragement to me. Mark Bennet, of SACTWU made available an enormous pile of research data the union has accumulated over the past few years, saving me a lot of work. To all the Production Managers (in the UK and South Africa) who walked me through their factory, explaining the process of shoe manufacturing, I wish to express my gratitude. Finally I would like to thank the Co-Directors of the ISP for providing me with the opportunity to undertake this project. In particular, I thank Raphie Kaplinsky for all his encouragement, his friendship and his valuable comments on an earlier draft of this report.

CHAPTER ONE

Introduction

There is an emerging consensus amongst economic policy makers that amongst the most important development problems facing South Africa today are the extremely high unemployment levels (estimated at 40% of the formal labour force) and the need to satisfy the basic needs of South Africa's population (ie, food, shelter, clothing and footwear etc). There is also agreement that in order to achieve these twin objectives it is necessary to obtain positive and increasing economic growth rates. The question of how these high and sustainable economic growth rates can be achieved has spawned an intense debate about South Africa's future growth path.

This debate about South Africa's economic future after Apartheid is based on differing evaluations of the opportunities offered by the country's current resource endowments and the constraints inhibiting growth (Moll, 1991a, 1991b; Kaplinsky, 1991; Jordan, 1991, Levy, 1991). Some writers[1] have argued that a low wage, labour intensive export strategy is the only way that South Africa can rapidly create employment and meet the needs of international competition (Moll, 1991a). Moll therefore argues that increasing the demand for unskilled labour will benefit the poor most.

To compete successfully internationally on the basis of low wages (as Moll suggests) is only possible by increasing relative poverty, resulting in increases in absolute poverty, it has been argued (Kaplinsky, 1992). The recent literature (Amsden, 1989; Wade, 1990) on the success of the East Asian NICs (particularly South Korea and Taiwan) strongly refutes the neo-classical view (Little, 1979; Lal, 1983) that developing countries should grow by exploiting their static Comparative Advantage (CA), that is, exploiting the availability of abundant cheap labour. These writers (Amsden, 1989; Wade, 1990) argue that developing countries can move up the value added chain - making it possible for them to pay relatively higher wages - by selective intervention in the market.

A recent World Bank study (Levy, 1991) analyses the potential of South Africa's manufacturing sector to move on to a dynamic labour-demanding growth path. In analysing the potential of the Garment Sector (the most labour-intensive sector), Levy (1991) argues that South Africa's international comparative advantage lies in the mid-to-upper end of the world garment industry and expanding exports from this sector will increase employment and allow "moderate increases in real wages".

In this paper we develop Levy's proposition - that a labour-demanding export strategy is possible in South Africa for the Garment subsector - for the Footwear subsector. This study will focus on the Footwear subsector for the following reasons. This is a mature industry which is well-established in South Africa. It still remains labour-intensive and well suited like the garment subsector for a labour demanding growth strategy (Levy, 1992). It has a well developed infrastructure in South Africa. However the relative performance of this sector in comparison to that of countries at similar levels of development (the NICs) has been poor (discussed below). It is striking that Footwear has been a leading export sector for the most dynamic, Developing, as well as, Southern European economies during the 1970s and 1980s (Taiwan, Korea, Brazil, Italy, Spain, Portugal, China).

Two sets of questions arise from the above discussion.

Firstly, like the manufacturing sector as a whole, the performance of the South African Footwear subsector has been unspectacular during the 1970s and 1980s. Why has this been so? What is the capability of the Footwear sector to supply the domestic market and to compete internationally ie, export? What are the implications of this for industrial policy? What incentives have been supplied to support the development of

---

[1] See Moll, T., 1991a, "Micro - economic redistributive packages in LDCs" in Moll, P. et al. (eds), Redistribution: How can it work in South Africa? Cape Town, David Philip.

this sector and how effective have they been? What incentives will be required to advance the restructuring and development of this sector? What institutions exist in support of this industry and how can these institutions be developed and extended?

Secondly, as South Africa develops a more outward oriented manufacturing strategy, it will have to understand the changing nature of international markets and international competition. How have these markets changed? What is the new basis of international competitiveness? What are the implications for South Africa?

The objective of this study is to attempt to answer these two sets of questions. The second set of questions will not be answered in any detail in this study, but will draw extensively on a study undertaken by the author (see Ismail, 1992).

Previous attempts at developing an analyses and strategy for the industry have been inward oriented (see Van Wyk's IDC Report, 1988) and ad hoc (BTI, 1990). Whilst Sid Cohn's Strat Plan 2000 has gone furthest in developing a systemic approach to the footwear industry, his focus on subcontracting as the main (labour) cost cutting measure has only served to gloss over the underlying inefficiencies of the industry in the management of raw materials and production. We provide a brief summary and critique of these strategies below before presenting a summary of our argument.

1. Previous attempts at developing a strategy for the Footwear industry - A summary and critique

The footwear sector is a relatively neglected sector in South Africa spawning very little research and study. The crises in the industry in the mid eighties required some policy response by the industry and the state. Two significant studies of the industry were undertaken: that of Van Wyk (1988), - an attempt by the IDC to formulate an industrial policy; and that of Sid Cohn (1987) - a business consultant briefed by footwear manufacturers to develop a strategy for the industry as a whole.

The analyses and policy proposals of both these studies are strikingly different. Both writers are in favour of maintaining high levels of protection for the industry favouring import quotas instead of tariffs. However, Van Wyk takes a narrow, conservative and inward oriented approach favouring a growth strategy for the industry which is based on the domestic market - inward industrialization. Sid Cohn adopts a systemic approach analysing both the backward and forward linkages of the industry and argues that a growth strategy for the industry must be based on both defending the internal market from import competition on exports - export orientation. Whilst he discusses the numerous weaknesses and problems of the footwear manufacturers that impede international competitiveness - both the high costs, poor quality and erratic supply of inputs (tanned leather and synthetic products, components), poor production management, low training of all levels of the workforce - his main strategy to reduce costs is to subcontract the most labour intensive part of the manufacturing process to small workshops. This, he argues, will both contribute to increased flexibility by removing the bottlenecks in production during periods of increased demand, and reducing the overhead and labour costs by 10% (3% on labour and 7% on overheads).

Whilst Sid Cohn's study is to be recommended for adopting a systemic approach and identifying most of the factors that result in high cost and low productivity of the footwear industry, his strategy has failed to advance the industry significantly because he shifts the focus from these critical issues by advocating that the solution for the industry lies mainly in the reduction of overhead and labour costs through subcontracting. On the other hand, Van Wyk's (IDC) strategy for the industry is inward looking, favouring continued and increased protection, thus maintaining the inefficiency and uncompetitiveness of the footwear manufacturers. His export pessimism is incomprehensible in the light of the export strategy supported by footwear manufacturers themselves (through Sid Cohn's Strat Plan 2000).

We will argue that the approach of the Van Wyk study is inappropriate and unsustainable as a growth strategy for the footwear industry. We will also argue that whist Sid Cohn's overall approach does attempt a systemic study of the industry (studying the entire filliere or pipeline) he fails to carry through the very useful insights gained as to the nature and causes of the problems and bottlenecks that have resulted in the high cost (higher than international prices), and irregular and low quality of the inputs that feed into the footwear industry. His focus on subcontracting as the main strategy to reduce cost and increase flexibility serves only to shift the emphases from the structural problems that he himself has highlighted. Crucially, his attempt to reduce labour costs and increase labour flexibility (by developing a dual labour force, a core and peripheral labour force), only serves to shift the attention from the inefficiency of production caused by outdated production methods, high levels of stock (through high WIP), high reject rates and/or returns, poor delivery rates and an inability to target particular segments of the market, poor quality of products, poor management training, and almost nonexistent training of supervisors and operators (except by some of the major companies who conduct in-house training). A focus on labour cost reduction (through subcontracting) is misplaced as labour in South Africa (by Sid Cohns own calculations) constitutes only 17% of the total cost of production whilst in the UK it constitutes over 40% of total cost. In addition his attempt to reduce labour costs feeds into managements obsessive and erroneous complaint that labour costs in South Africa are too high compared to our competitors. In fact Taiwan which has been South Africa's main source of low valued imports (until more recently when imports from mainland China have become dominant) has wage levels which are twice that of South Africa's (see Table below).

A major investigation of the industry was also undertaken by the BTI (together with the DTI and the IDC) (commenced on the 27 November 1987). Whilst the Board did undertake a study of the entire footwear pipeline and discussed possible scenarios for possible structural adjustment for the footwear industry, it shied away from making any recommendations for a comprehensive structural adjustment programme (whilst recognizing that such a programme is necessary). The recommendations of the Board restricted itself purely to tariff policy. The Board of Trade and Industries report moved away from an import substitution / inward industrialization strategy supported by Van Wyk and instead was fully supportive of Sid Cohn's Strat Plan 2000 Strategy. The Board however refused to provide a 20% (of sales) import quota favoured by Cohn and went as far as removing the formula duties, opting instead for a more transparent tariff policy of ad valorem duties (increasing the duty for synthetic and fabric uppers to 60% ad valorem for a period of three years, scaled down to 35% over the subsequent five years; 30% duty on leather uppered shoes). Although the report of the Board was published on the 30 of April 1990, the duties only came into effect on the 2 of August 1991.

2. Our argument summarized

The most significant cause of the underdevelopment (relative to that of other developing countries) of the footwear sector in South Africa, is the very low levels of investment in labour intensive activities (see Levy, 1992; Kaplinsky, 1992) and the high levels of protection (causing a vicious circle of increasing inefficiency and uncompetitiveness and increasing protection), which encouraged an inward looking industry to rely on State support (protection) to remain viable.

With the aggressive entry of China into the world export markets in the late eighties and early 1990s (a major source of imports for retailers operating at the lower end of the market), South African producers manufacturing at the lower end of the market have become uncompetitive. China's wage rates at US$50 a month is one sixth South Africa's (at approximately 300 dollars). Internationally, footwear producers at the lower end of the market are extremely sensitive to labour cost increases and South Africa is reflecting the global tendency of footwear producers -

particularly those producing at the lower end of the global markets - to relocate to lower labour cost regions (ie, to the TBVC and BLS states).

South Africa has a potential comparative advantage in the production of higher value added footwear (ie, in leather footwear). Whilst the cost of materials are similar world over (at international prices), the cost of our labour is still lower than those East Asian countries producing footwear at the mid-to-upper ends of the global markets. Whilst SA exports have been very low, the fact that we have been exporting to Europe is significant, reflecting a capacity to produce the right quality product at the right price. In addition, South African Companies have developed significant linkages through their own wholesalers (the Conshu group in the UK), franchising and subcontracting arrangements (example, with Bally) and historical links (example, Futura with Bata) with European and North American Markets. Manufacturers who produce at the mid-to-upper level of the market are not threatened by imports. Retailers operating at this level of the market stated that they imported less than 20% of their sales (interviews). These manufacturers are clearly competitive in the domestic market.

Whilst the above factors do suggest that South Africa has a potential comparative advantage in the production of higher value added footwear (leather footwear) it does not necessarily mean that it will be competitive internationally. To be competitive in the International markets and expand exports they would need to undertake a major restructuring at the level of the firm (adoption of new techniques of production, reducing high levels of WIP, investment in new technologies (CAD), increased co-operation between management and labour) and inter-firm level (between footwear manufacturers and leather tanneries and component suppliers). Relationships between the manufacturers and local retailers too need to be improved.

A major structural adjustment programme would have to be undertaken at the industry wide level (the leather footwear filliere) to reduce input costs and improve feedstock delivery, (of mainly tanned leather). The incentive system should be biased towards the manufacturer, thus expanding production and demand of inputs. A parallel attempt should be made to improve the incentive system in favour of the tanneries rather than the Raw Hide and Wet Blue exporters, preventing the export of Raw and Wet Blue Hides. As the footwear industry expands and increases its demand, it will increase its use of locally tanned leather. To facilitate this restructuring, management training is essential to eliminate their parochialism and re-orient management to understand what is necessary to produce for global markets. Training of the workforce at a both supervisory and operator level is crucial to improve productivity and encourage the participation of the labour force in quality and product improvement.

This argument is developed in our analyses of the footwear subsector below. Detailed evidence obtained from our interviews and study of the literature will be submitted in support of our argument that South Africa's potential international competitiveness lies in the mid-to-upper end of the global footwear markets. The requirements to turn this potential comparative advantage into international competitiveness will be discussed in this study and policy proposals will be presented.[2]

This paper will be structured as follows:

In Chapter Two we outline the main trends of the footwear subsector with respect to its share of manufacturing investment, production and employment and the structure of the industry. In Chapter Three a strategy for the industry is proposed. In

---

2 What I will be arguing here is that South African Footwear Manufacturers can move to take advantage of this potential comparative advantage in the production of higher value added leather footwear. There is currently scant evidence that manu-facturers are willing to take advantage of this potential (seen in the low levels of investment and exports). However, my task in this paper is to investigate the potential comparative advantage of the footwear industry and suggest policy proposals that will enable manufacturers (and the other major actors - the Unions and the State) to take advantage of this potential comparative advantage, turning it into international competetiveness.

Chapter Four the backward and forward linkages of the Leather footwear filliere are discussed. The main incentives (trade policy and export incentives) for the industry are presented in Chapter Five. Chapter Six analyses the footwear industry's productivity problems and discusses its training needs. Some data obtained from our study on the informal sector is presented in Chapter Seven. The role of the key institutions in the footwear sector is discussed in Chapter Eight. We summarize the findings of our study and present proposals in Chapter Nine.

3. Methodology

This study takes up a number of questions relating to South Africa's international competitiveness in the footwear sector that arose from a study undertaken by the present writer (Ismail, 1992). It explores these issues through a series of interviews with production and plant managers of the major footwear firms, MDs of the major companies, trade union representatives, and informed individuals working in a number of institutions relating to the footwear industry. A list of the above personalities and their institutions are provided in Annexure A. The argument presented in this paper was tested and discussed with several of the personalities listed in Annexure A. The main objective of this study is to try to develop an overall industrial strategy rather than to present detailed policy advice. The main limitation of this study is that all of the interviews of footwear firms were conducted in Natal.[3] Although about 70% of footwear firms are located in Natal (PMB, Durban and Pinetown) the study might suffer from a regional bias. In addition, we were unable to visit / interview firms from the Bolton group (the fourth largest company) - a major producer of leather (including exotic skins) shoes. This omission was due to time and resource constraints.

However, we were able to obtain a national perspective by talking to the national directors of the other three major companies, the President and ex-President of the FMF, and other institutions (LIRI / NPI) that operated nationally.

The comparative firm level study in Chapter Three was made possible by a detailed study of the Bally plant in the UK during September 1992. We conducted detailed firm level visits of the South African firms assisted by the production managers of the all of the plants surveyed. International comparative studies are highly complex and the comparisons with the South African firms must be regarded as a rough approximation of the differences in plant level productivity.

The study on the informal sector is primarily based on evidence supplied by interviewees from the formal sector (ie, secondary sources). It does not have the insight that we could have gained by tracking down a large number of informal producers in their homes and workshops. The reader should thus read the evidence presented of the informal sector with caution.

Finally, the policy proposals in the concluding chapter should be regarded as tentative. It is envisaged that these proposals will be discussed and workshopped with the trade unions, employers and other interested organisations and institutions as part of a process of strategic policy formulation for the footwear sector.

---

[3] However the 5 large Footwear plants that we visited and conducted detailed firm level studies employ over 4000 workers collectively - approximately one sixth of the total workforce formally employed in the footwear industry in the Industrial Council Areas.

CHAPTER TWO

Footwear in the South African Economy

This Chapter will undertake a brief descriptive overview of the Footwear (ISIC: 3240) Subsector. The following will be discussed to establish the trends and evaluate the trajectory of the footwear subsector: Share of manufacturing production and value added; Output (production)(volume and region); employment (numbers and regional variation); and the racial and gender composition of the workforce.

1. Relative size and share of Footwear in manufacturing production

The trend is towards a declining share of production and value added!

TABLE 1

PERCENTAGE SHARE IN MANUFACTURING (CONSTANT 1990 PRICES)

	1972-1974	1980-1982	1988-1990
Production (ex-factory sales)	1,0	0,9	0,8
Value Added	1,0	0,9	0,9
Employment	2,1	2,1	2,2
Fixed capital stock (Net)	0,4	0,2	0,2

Source: IDC, Industry Profile, 1992

Table 1 indicates that the footwear subsector occupies a small share (less than 1%) of total manufacturing output in South Africa. In addition, this share has been declining steadily, from an average of 1% in 1972-1974, to 0,9% in 1980-1982, to 0,8% in 1988-1990 (see Table 1 above). The rate of increase of manufacturing value added too, lagged behind that of manufacturing as a whole. Footwear's share of value added in manufacturing fell from 1% in 1972-1974 to 0,9% in 1980 remaining at that level until 1992.[4] Its share of employment however was larger, taking up 2,1% of total employment in manufacturing in 1972-1974, but remained largely static until 1988, when it grew to a mere 2,2% of total employment in manufacturing.

The Leather and Footwear Sub-sectors (combined) reflect declining Investment and Capital/Labour ratios. Whilst the capital/labour ratio for manufacturing as a whole

---

[4] In comparison the share of footwear manufacturing in the total output of Brazilian manufacturing has been growing since 1975. The value of output of footwear manufacturing as a percentage of total value of overall manufacturing increased from 0.8 % in 1975 to 1.4 % in 1985 (Prochnik, 1992).

has increased from R37,000 per worker in 1972 to R65,000 per worker in 1990 (in constant 1990 prices) it remained almost static for leather and footwear (ISIC: 323/4) remaining at R7,300 - R7,400 between 1972 and 1990 (IDC, 1991; see Table 8 in Kaplinsky, 1992).

In addition the percentage share of leather and footwear in the total share of capital stock in manufacturing declined from 0.6 percent in 1972 to 0.3% in 1980 and remained static at 0.3% until 1990 (see Table 4 in Kaplinsky, 1992). This decreasing capital stock can be attributed to the declining investment in labour intensive subsectors as a whole in South Africa (see Kaplinsky 1992, Table 14). Leather and Footwears share of total net investment during 1972 to 1990 is 0.1% the second lowest figure (for a subsector) recorded after clothing (see Table 5 in Kaplinsky, 1992).

2. Output and Employment - Footwear

Footwear production in South Africa reflects a pattern of relatively rapid growth 1917-1940, slow and gradual growth (1940-1980) and rapid decline in the 1980s (see Table 2). Initial growth was relatively rapid with 1,7 million pairs being produced in 1918 and 4,1 million pairs in 1930 growing at 14% per annum. This high level of growth fell slightly to 13% per annum between 1930 and 1940 with 12,5 million pairs produced in 1940. The level of growth fell sharply since producing an average of under 4% per annum between 1940 and 1970. Between 1970 and 1980 the annual average growth rate increased to 5,2% per annum only to register a fall between 1980 and 1990 with the average annual growth rate for 1980-1990 being 0,47%. Between 1982 and 1990 the growth rate had become negative - registering an average negative growth of -0,6% per annum. Between 1989 and 1990 alone the there was a decline in the production of footwear with the growth rate falling by -12,04% and production registering an absolute fall from 61,7 million pairs to 54,2 million pairs. This trend has continued with total output in 1991 falling by 3.08% and registering a total of only 52.61 million pairs. Between 1991 and 1992 output is widely expected to fall by almost 20% (interviews).

TABLE 2

FOOTWEAR PRODUCTION AND EMPLOYMENT IN SOUTH AFRICA

	Volume of Production (No. of Pairs)	No. of Employees
	Average annual Growth (In percentages)	Average annual Growth (In percentages)
1918 - 1930	14	7
1930 - 1940	13	6.8
1940 - 1950	3.8	4.7
1950 - 1960	3.4	0.48
1960 - 1970	4.3	2.9
1970 - 1980	5.2	2.1
1980 - 1990	0.47	0.2
1981 - 1990	-0.6	-0.9
1990 - 1991	-3.08	-1.39
1991 - 1992*	-20	-10

Source: Calculated from FMF (1991b) * Interviews

The pattern of employment follows that of production fairly closely, with employment growth - especially in the early period - growing in a less spectacular manner than output. During the period 1917 to 1940, when output was growing at over 13% per annum, employment was growing at under 7% per annum. Between 1940 and 1980 output was growing at just under 4% whilst employment only grew at less than 3% per annum. A rapid fall in employment followed the decline in the growth of output in the 1980s, registering only 0,2% growth between 1980 and 1990 and negative growth of -0,9% between 1981 and 1990. Between 1989 and 1990 alone the fall in employment recorded was 4,3%. This trend is continuing in the 1990s, with employment falling by 1,4% between 1990 and 1991. Between 1991 and 1992 employment is expected to fall by almost 10% with the closure of about 31 firms (interview G. Borg). Between 1989 and 1992 employment will have fallen by almost 25% (approximately 5 500 workers) ie, employment in the industry will have fallen from 27 535 workers in 1989 to approximately 22 000 at the end of 1992.

Production is shifting to the TBVC states or South Africa's Bantustans.

Table 3 below suggests that whilst there has been an absolute decline in output in the Industrial Council (I.C.) areas of South Africa, from 54,739 pairs to 54,277 pairs, between 1985 and 1990, there was in fact a small increase in the volume of total output, when production in the BLS states and the "homelands" (the 13 "states") are included into the statistics. Total output of footwear, including the BLS states and the "homelands", for the period 1985 to 1990, increased from 62,739 pairs to 81,957 pairs.[5] Thus the 13 "states" (the homelands and the BLS states) share of the total footwear market (volume of total output) has increased from 8% in 1985 to 29% in 1990. There is thus a clear trend for production of footwear to shift away from the I.C. areas of South Africa towards the "homelands" and the BLS states, in search of lower wages![6]

TABLE 3

OUTPUT IN PAIRS ('000's)

Year	Within I. C.	Imports	13 States	Total Market
1984	58,318	26,648	4,000*	88,966
1985	54,739	15,336	8,000*	76,075
1986	60,728	16,376	12,000*	87,104
1987	60,977	29,281	15,000*	97,258
1988	62,456	15,523	20,200	98,179
1989	61,707	11,153	26,000	98,860
1990	54,277	11,950	27,680	93,907
1991	52,614			
1992	42,000?*			

* Estimates obtained from interviews

Source: Davidson, S., 1992.

5 This figure is obtained by adding the total output for the I.C. areas of South Africa and that for the output of the 13 "states".

6 Interviews we conducted with the MDs of the major firms suggested that their search for lower wages was the major reason for their increasing relocation to these areas (we discuss this further below).

3. Regional distribution of output and employment - Footwear

TABLE 4

FOOTWEAR PRODUCTION AND EMPLOYMENT
PERCENTAGE SHARE PER REGION

Year		Western Cape	S Cape & Mid/Border	Natal	T/vaal	Total
1940	production	16.8	46.9	11.8	24.5	100
1950	production	17.6	39.5	19.4	23.5	100
1960	production	15.2	31.8	37.5	15.5	100
	employment	19.44	31.51	32.6	16.46	100
1970	production	15.8	22.3	52.8	9.1	100
	employment	23.43	25.17	45.6	76.33	100
1980	production	14.9	16.6	64.8	3.7	100
	employment	21.63	20.75	53.22	4.4	100
1990	production	19.2	8.9	69	2.9	100
	employment	23.06	15.36	58.64	2.93	100

Source: FMF (1991a, 1991b)

Table 3 shows the shift in the regional distribution of production over time - 1940 to 1990. Footwear production has shifted from the Eastern Cape (Mid/Border region), which held 46,9 per cent of the share of production in 1940, and the Transvaal (which held 24,5%), to Natal and the Western Cape. Natal's share of footwear production in 1990 constituted 69% of the total share and its share of employment constituted 58.6% of the total share. The Western Cape benefited to a lesser extent holding 19,2% of the share of production and 23% of the share of employment.

4. Employment Distribution by race group

TABLE 5

COMPOSITION OF EMPLOYMENT
PERCENTAGE SHARE

	1972-1974	1980-1982	1988-1990
Whites	7	5	4
Coloureds	43	42	40
Asians	36	33	33
Blacks	14	20	23
Total	100	100	100

Source: IDC, 1992a

Like the Clothing industry, this industry reflects a racially mixed labour force, with a large percentage of Coloured and Indian workers - Coloureds workers are in the majority. The industry is thus a major employer (second only in importance to clothing) of Coloured workers in the Cape and Indian workers (in Natal). The increasing percentage of African workers being employed - from 14% in 1972-74 to 23% in 1988-90 suggests an increasing shift to lower cost labour. This latter trend to reduce cost is also reflected in the increasing percentage of women in the Footwear labour force.

5. Gender composition of the labour force

The industry has a majority of female workers.

TABLE 6

GENDER COMPOSITION OF LABOUR FORCE
PERCENTAGE OF WOMEN EMPLOYED

1974	1985	1988	1991
38	50	52	59

Source: NPI Data Bank, 1992.

Whilst the percentage of Women employed in the footwear industry was relatively small in 1974 (38% of total), by 1991 the figure had increased to 59% of total employment (see Table 5 below). If account is taken of the very high percentage of women involved in outwork and subcontracting of parts of footwear production, this figure could reach over 70% of total employment (discussed below).

6. Size of Factories

Table 7 (in the Appendix) shows the trend in the size of footwear firms over time - 1953 to 1990. This trend reflects an increasing firm size seen in the increasing number of firms employing a larger number of employees and the increasing domination of large firms in total output. In 1953 there were only 7 large factories producing over 500 000 pairs of shoes, constituting 37.89% of total output (see Table 7). By 1965 this number had risen to 11 and by 1977 to 20, constituting 61.8% of total output. By 1989, 35 factories produced more than 500 000 pairs per annum and constituted over 75% of total output (see Table 7).

The number of medium sized firms remained almost the same (38 in 1953 and 43 in 1990) but their share of total output declined steadily from 53% in 1953 to 37% in 1965 to 34% in 1977 and 20.8% in 1990. The number of small factories remained relatively constant between 1953 and 1977 (33 in 1953 and 29 in 1977). However the number of small firms rose sharply in 1980, increasing from 26 in 1984 to 56 in 1987 and 102 in 1989. By 1990 this number rose to 122. In contrast the number of large firms fell sharply between 1989 and 1990 falling from 37 to 31 (see Table 7 in Appendix).

7. Concentration of Ownership

The concentration of production in large firms (over 75% by the 35 large firms) is also reflected in the concentration of ownership in the industry. In 1987 Sid Cohn estimated that over 66% of footwear was controlled by the major companies (Shoes and Views, Vol. 53, No. 5, 1987). The industry is currently dominated by four large firms (CONSHU, AMSHOE, FUTURA and the BOLTON GROUP) which are responsible for more than 70% of total output (in value).[7] The largest company alone controls 20% of the total volume of production and 35% of the total value of production (interview with Robert Feinblum, Executive Director, CONSHU).

[7] I have calculated this by taking Feinblum's (CONSHU M.D.) claim that the CONSHU Group controls 35% (in value) of total footwear output in South Africa. CONSHU's Turnover for 1991 was R621 million. The 1991 Turnover of the other three Groups (from Annual Reports) combined adds up to approximately R600 million. Thus in value terms the four groups combined control over 70% of total footwear production.

CHAPTER THREE

Market and Industry structure and capabilities - Assessing International Competitiveness

In this chapter we will begin (in section one) by analysing the changing consumer markets in the domestic economy and discuss the policy implications for industrial strategy. Van Wyk's (1988) argument will be discussed and critiqued. We then proceed to discuss South Africa's international competitiveness by distinguishing between two main segments - the lower end of the global market and the mid-to-upper end. South Africa's competitiveness in each of these segments will be discussed in section two and three respectively.

1. The changing South African consumer markets

Per capita consumption of footwear has been estimated (Van Wyk, 1988) to have averaged 2,0 pairs per year during the period 1976-1987 and increased to 2,4 pairs per annum for the period 1981-1986. Our estimates are that this figure has remained static or fallen to 2.3 pairs per annum for the year 1990.[8]

In comparison with per capita consumption of developed countries and the newly industrializing countries (NICs) our consumption is relatively low (see TABLE 8 below).

TABLE 8

PAIRS PER CAPITA IN 1985

France	5,4
UK	4,9
West Germany	4,5
USA	5,4
Australia	4,7
Taiwan	3,0
Brazil	3,0
South Korea	2,0
South Africa	2,4

Source: Van Wyk 1988

[8] South Africa's population has been estimated to be growing at approximately 2.6% per annum while the total supply of footwear has grown by a mere 1.9 percent per annum between 1987 and 1990 (see Table 3). Total supply in 1990 (93,9 million) divided by population of approximately 38 million in 1990 gives us a per capita consumption of 2.4. However the total supply figure for 1990 includes the BLS states and excluding them will reduce per capita consumption to much lower levels.

Van Wyk's (1988) study of consumption patterns reveals an increasing trend in the market towards lower valued footwear.[9] This trend towards lower valued footwear continues to persist in the early 1990s.[10]

South Africa's growth in demand and private consumption expenditure remained almost static in value between 1980 and 1989. Private consumption expenditure for shoes was R1,59 million in 1980 and R1,47 million in 1989 whilst total demand for shoes fell from R1,82 million to R1,81 million for the same period (IDC, 1991). Total output of footwear however had increased from 56,9 million in 1980 to 61,7 million in 1989 (this figure is much higher if production in the 13 `states' is taken into account) and total demand in terms of pairage had increased to (98,8 million (including the 13 `states') (see TABLE 9 below).

This trend confirms Van Wyk's observation (1988) of a preference by the South African consumer of a lower valued shoe. However Van Wyk's point - that domestic market displays a preference for lower valued footwear (reflecting the low income of the majority of the population) - and our analyses (above) that this trend is continuing does raise an important question about the capacity of local producers to meet local demand for low priced footwear and thus meet basic needs of the majority of the population.

A number of questions arise from the above discussion: Can local producers of lower valued (ie, lower priced rubber, canvas and plastic footwear) footwear supply the domestic market at internationally competitive prices (ie, at prices that are relatively lower than the prices our competitors - eg, from China - can supply us for)? Why? It is to these questions that we now turn in this section.

2. South Africa's Competetiveness at the Lower End of the Global Footwear Markets

In this section we begin by assessing South Africa's competitiveness at the lower end of the global footwear markets (section 2.1.). We argue that South Africa is uncompetitive at the lower end of the global footwear markets. We then proceed to discuss three main reasons for this uncompetitiveness (section 2.2.). In the final section (section 2.3.) we discuss the global tendency for the lower end (lower value added) of footwear production to move to low wage regions.

---

9 Various studies undertaken by UNIDO (1992) and the World Bank (Mody et al, 1991) have defined leather footwear as being in the mid-to-upper category in terms of value added - and shoes made of plastic, rubber and canvas (textiles) are generally defined as belonging to the lower value added category. Footwear that is both leather uppered and manufactured with leather outer soles (ie, category (iii) in Table 10) requires more labour to produce. Leather is generally more costly to obtain than other inputs such as rubber, plastics and canvas. There are some exceptions to this general situation - fashion and design intensive footwear made with canvas (eg, ladies fashion) or rubber and plastics (eg, fashionable running shoes) sometimes fall into the category of higher value added footwear.

10 Figures supplied by the FMF (1991a) reveal that the production of leather uppered footwear with les (higher valued footwear) declined from 4.9 per cent in 1985 to 3.5 per cent in 1991. Interviews we conducted with manufacturers and retailers confirm the existence of such a trend in the market.

2.1 Assessing South Africa's competitiveness in the lower end of the global footwear markets.

TABLE 10

CLASSIFICATION OF LOCAL PRODUCTION AND IMPORTS IN 1986 ACCORDING TO THE MATERIALS USED IN THE PRODUCTION THEREOF

	Local Production (%)	Imports (%)	Imports as % of Total Demand
(i) Synthetic uppers, rubber or plastic outer soles	10.4	45.8	54.4
(ii) Fabric uppers, rubber or plastic outer soles	6.4	24.4	50.6
(iii) Leather uppers, and outer soles	4.3	3.0	16.1
(iv) Other uppers, rubber or outer plastic outer soles	37.2	22.6	14.1
(v) Leather uppers, rubber or plastic outer soles	38.9	2.4	1.7
(vi) Wood, cork and other shoes	2.8	1.8	15.0

Source: BTI (1991)

Table 10 points to South Africa's uncompetitiveness in the lower valued shoe market (ie, shoes with plastic, rubber, synthetic and fabric uppers). Imports of footwear in category (i) and (ii) (lower valued) in Table 10 above constitute over 70% of the total imports in pairs whilst shoes with leather uppers (higher valued) (iii) and (v) account for only 5,4% of pairage imports in 1986. In both category (i) and (ii) local producers are only able to supply 50% of the market at competitive prices, quality and fashion forcing retailers to supply over 50 of local demand from imports.

Our survey of retailers confirms that the above trend has continued in the early 1990's. Two of the large retailers (Pep Stores and the Scotts group)[11] which supply the mid-to-lower end of the market, imported over 50% of sales in spite of the additional cost of tariffs (60% duty plus surcharge on non-leather footwear), transport and handling charges.

Thus in the Footwear Industry over 50% of our basic needs are being imported. Why is this so? There is a simple answer to this question: Imported shoes are cheaper and better quality! Two examples will suffice:

11 Information obtained by telephonic and fax interviews by writer.

Example One

In the course of our interview with the largest footwear retailer (Gordan Atkins, National Buyer, PEP stores) in the lower end of the domestic market we obtained the following example:

TABLE 11

COST PER PAIR OF LADIES CASUAL SHOE MADE WITH SYNTHETIC MATERIAL

Local ex-factory price		R22.00
Import price:		
ex-factory price ($4 f.o.b.)	R12.00	
plus duties @60 % ad valorem	R 7.20	
plus surcharge @15 %	R 1.80	
Total Import price		R21.00

Source: Gordan Atkins, PEP Stores, (Interview).

Thus even after adding 60% duties and the 15% surcharge onto the imported shoe it is still cheaper than the locally manufactured shoe!

Example Two
Manufacturer Increasingly Turning to Imports of Finished Shoes

A major local manufacturer (Beiers footwear) producing in the mid-to-lower end of the market has turned to importing a significant percentage of finished shoes from East Asia (mainly China) and wholesaling them to local retailers. His strategy follows the same trend as that of US manufactures in the 1970 and 1980s (See Ismail, 1992). The reason he gave for this is that it is cheaper to import certain categories of synthetic shoes than produce them in his factory, even after the duties, surcharge and transport cost are included.

TABLE 12

COMPARISON - IMPORT COST AND LOCAL EX-FACTORY PRICE

Import cost of synthetic hiking shoes (f.o.b. and inclusive of import duties @ 60 % ad valorem plus 15 % surcharge)	R12.00
Ex-factory price of local manufacturer	R18.00

Source: Manager, Beiers Footwear (interview)

2.2 Reasons for South Africa's uncompetitiveness at the lower end

Why are we unable to compete with imports at the lower end of the market? The following three factors perhaps are the main reasons for our lack of competitiveness:

2.2.1. The high cost of inputs
2.2.2. The relatively high cost of labour (compared to China)
2.2.3. Poor Management, poor quality of local products, poor and irregular delivery time.

We will discuss these issues briefly below.

2.2.1 High cost of inputs

TABLE 13

MAJOR COST COMPONENTS AS A PERCENTAGE OF SALES - 1991

	Ladies	Mens
Raw materials (%)	48,0	46,4
Direct labour (%)	17,3	14,1
Manufacturing overheads (%)	4,5	12,4
Administration overheads (%)	8,1	6,8
Selling and distribution Overheads (%)	6,56	9,3
Operating profit	5,7	11
Total	100	100

Source: NPI Databank (1991)

The Table above clearly illustrates that Raw materials make up the largest share of the total cost of production in the footwear industry.[12] Whilst direct labour is the second largest component of cost, it is far below that of Raw materials, constituting only 17% of total cost for Mens shoes and only 14% of the cost for ladies shoes. Raw materials on the other hand make up 48% and 46,4% of the cost for mens and ladies respectively.

It is thus quite remarkable that the task of reducing raw material costs has not occupied the minds and strategic perspectives of the previous writers on the Industry (Van Wyk, 1988 and Sid Cohn, 1987). The BTI study appears most ideological in its dismissal of the need to reduce these costs. Whilst the report (BTI report No. 2877, 1991) acknowledges that domestic raw material prices are generally higher than those of the overseas competitors it argues that "this does not appear to present a serious problem", and argues instead that the industry's ability to contain labour costs by resisting unrealistic wage increases and improving labour productivity will be a major factor affecting its competitiveness" (BTI, 1991, 26).

The materials used in the footwear industry at 1985 prices were purchased from the industries listed in Table 14 below:

---

[12] This data does not differentiate between the different categories of footwear. Whilst we do not have disaggregated data we can say that raw material costs are much higher for leather footwear (higher value added footwear) than for lower value added footwear. The latter are produced largely with plastics, rubber and textile inputs.

TABLE 14

COMPOSITION OF MATERIALS AND SERVICE USAGE: (%)

1. Tanneries	40,0
2. Synthetic resins and plastics	10,5
3. Rubber and plastic products	7,1
4. Footwear	6,8
5. Textiles	9,6
6. Pulp, paper and packaging materials	3,2
7. Other manufacturing and service industries	22,8

Source: BTI (1992)

The footwear industry has strong backward linkages with the leather, plastics, rubber and textile industries. All manufacturers we interviewed identified the high cost of raw materials as a major factor in making them uncompetitive with international competitors.

Most manufacturers we interviewed complained about the high cost of raw materials and inputs. The reasons for this are clearly related to the protection of the major upstream industries, resulting in higher local prices and the concentration of production by upstream suppliers in most cases by monopolies (see discussion in Chapter Four below of the footwear filliere).

Monopoly pricing prevails in the market for Rubber (with Karbochem, a subsidiary of Sentrachem being the sole manufacturer of elastomers or synthetic rubber).

Whilst PVC Compounds are produced by PVC Compounds and a few others, the main ingredient for the manufacturing of PVC compounds are produced by AECI Chlor-Alkali Plastic Ltd, the sole manufacturer!.

The cost of the products from South Africa's feedstock industries for the PVC compound industry are generally higher than international prices. Polyurethane and PVC coated fabric is produced by three local manufacturers. Local textiles produced for the footwear industry are both higher than international prices and of lower quality.

According to a major footwear manufacturer, the international price of PVC is about half the domestic price (see also Sunday Times 27/12/92).[13] Imported canvas is 30% cheaper than that supplied by domestic textile manufacturers (BTI, 1990).

The imports of leather uppered footwear is very small (less than 6% of total imports in 1986, see TABLE 10), and it would appear that those producing leather uppered footwear (even at the mid-to-lower end of the market) are relatively competitive. We will therefore discuss the cost of tanned leather in the discussion below when discussing our competitiveness in the mid-to-upper ends of the world footwear markets.

[13] PVC is obtainable at R1,350/ton on world markets compared with AECI's R2,700/t. Ad valorem duties are only 10 %, but with anti-dumping duties effective protection is closer to 40 %. Even though local consumers of PVC can buy PVC overseas for half that AECI charges, they end up paying the same price as local prices after freight charges and import duties are added on. This suggests import parity pricing. (Sunday Times, 27/12/92)

2.2.2 Labour Costs

Almost every interview we conducted with management suggested that management believed that it was labour costs that was the main factor that eroded the competitiveness of South African footwear producers. These were manufacturers who produced for both, the bottom, and upper end of the market.[14]

Whilst it is clearly evident from global trends that labour costs have been and still are the major factor for international competitiveness especially at the lower end of the global market it is clear too that this has not been the most significant factor for the uncompetitiveness of South African producers at the lower end in the 1980's. South Africa's main footwear competitor (in its domestic market) in the late eighties has been Taiwan (see Table 15; see also Chen, 1991). Comparing our wage rates with Taiwan suggests that South Africa's wage levels are not high by international standards.[15] While Taiwan has begun to relocate production and subcontract the lower value added production of shoes to the Chinese mainland, it is still competing successfully in the mid-to-lower end of the international footwear markets.[16]

TABLE 15
IMPORTS ACCORDING TO COUNTRY OF ORIGIN - 1987
(% Contribution to total imports)

Country	Value	Volume
Taiwan	44.1	48.7
Other	28.3	28.2
Hong Kong	11.5	19.5
Italy	10.7	1.0
Brazil	3.3	1.7
Portugal	1.9	0.6
UK	2.2	0.3

Source: Van Wyk (1988)

We suggest that Taiwan's competitive advantage is due to the relatively cheaper cost of inputs and South Africa's relatively higher input costs. The second reason is clearly due to the high levels of productivity achieved through superior management techniques. Evidence for the latter reason can be found in the results of a major World Bank study which found that the competitive advantage of the East Asian countries is mainly due to "improved production and management techniques" (see Mody et al, 1991; and Ismail, 1992). In comparison South African productivity levels have been dismally poor (discussed below).

The growing importance of China as the main source of cheap footwear has meant that labour costs have now become the major factor determining the loss of

---

[14] It was surprising that this view was even shared by senior managers of the Conshu Group who manufacture for the mid-to-upper end of the market and whose group has been exporting to the UK.

[15] Taiwan's wage levels are twice ours (see Table 15 below).

[16] Over 65% of production of footwear in Taiwan is still synthetic (World Footwear, Sep/Oct 1990). In 1989 Taiwan exported approximately 600 million pairs, about 100m were leather footwear and 500m were made up of synthetic rubber and plastic shoes (see Ismail, 1992, 57)

international competitiveness of South Africa's footwear manufacturers at the lower end of the global footwear markets. As China grows in importance as our major source of imported footwear (at the lower end) wage levels are going to become the major factor determining competitive advantage and competitiveness (see Section 2.3).

2.2.3 Poor Management, Poor Quality of Local Products, and Poor Delivery Times

Poor management, outdated production techniques and low investment and training are the major factors that have contributed to lack of competitiveness at the lower end. These factors have contributed to a low and declining level of productivity. We discuss these trends below (2.2.3.1.). We then go on to discuss the argument advanced above with reference to our case studies of firms producing in the lower end of the market (2.2.3.2.). The views of retailers at the lower end of the market are also discussed (2.2.3.3.) to assess the quality of products and efficiency (eg, delivery time) of local producers at the lower end.

2.2.3.1 Poor and declining long term productivity

The NPI Footwear Data Base reveals the following long term trend. A static long term labour productivity trend recording an average annual percentage change of 0.1% between 1970 and 1991 (NPI Productivity Statistics, 1992). Between 1979 and 1989 this figure was negative recording -0.9% (NPI, 1992, 20). Capital productivity too showed a similar declining trend in the 1980's thus recording a declining overall multifactor productivity trend for the 1980s (IDC, Footwear Industry Profile; 1992, 9)

This trend was also seen in the number of pairs produced per employee annually. The figure for annual output per employee has declined from 2,530 pairs in 1986 to 1,945 pairs in 1990 (NPI DATA Base, 1992, 13).

This declining trend in productivity was accompanied by a declining growth in the Fixed Capital stock between 1972 and 1990 (seen in Table 1 above). Nominal wage increases for the period 1970 to 1991 increased by an average of 12.5% per annum, resulting in a rise of unit labour cost of an average of 12,4% between 1970 and 1991 (NPI DATA BASE, 1992).

2.2.3.2 Case Studies of firms producing lower value added footwear

Our study of the major plants in the Natal region (PMB, Pinetown and Durban) revealed a backward thinking management, traditional, inefficient techniques and organization of production, reflected in plant layout , old machinery and technology, job demarcation and lack of training. However some factories are reflecting the necessary will and creativity needed to restructure and improve competitiveness. We will discuss these issues for those firms producing in the mid-to-lower end of the market, discussing both the inefficiencies and the potential inherent for restructuring the industry.

We will discuss the performance of two firms that we visited (firm A and firm B) (see Table 16 and Table 17 in Appendix). Firm A producers for the mid-to-lower end of the market supplying over 350 customers although 70 to 80% of its production is for the major retailers including Edgars and Foschini, and Discount stores, Hyperama and Pick and Pay. It is a high volume producer of synthetic footwear using PVC and Polyurethane as its main inputs. Its major complaint is that the domestic market is too small for it to produce in long enough runs to enable it to increase marginal profits. This firm's major complaint was: the high cost of inputs (that is, of PVC and PU); the

increase of cheap imports from China together with the illegal entry of such imports through Turkey (which only has to pay 3% import duties compared to 60% for China); and the squeeze on its profitability by the large retailers who forced it to reduce its prices. This firm had turned to importing a significant percentage of its production for local demand from China, as it argued that the cost of it importing a synthetic casual shoe (even after import duties and surcharge costs) was cheaper than its domestic production costs for a similar product. The reasons for its lack of competitiveness, in our view, are rooted in poor production management.

The factory layout is a traditional line system with transparently high stocks of raw material (R1,5m); WIP (R600,000) and finished goods (R460,000).[17] Machinery in the factory are ancient and according to the plant manager the average age of the machines are almost 25 years old. The company spends a mere R2000 per annum on training of the workforce. The level of absenteeism is high reflecting a low level of commitment of the workforce. The manager of the firm was extremely pessimistic about its ability to compete with increasing imports without very high levels of protection for domestic producers. To summarize his assessment of the future of the industry, he stated that "if I had a million rands I wouldn't invest it in a footwear factory"!

This very poor level of production efficiency we also observed in two other large producers of footwear in the mid-to-lower end of the market.[18] One of these firms complained of very high rates of product returns[19] from retailers who complain of poor quality (3 to 4% of sales). The NPI database (1992, 14) also reflects a steady increase in the rate of rejects in its factories from 0,9% in 1974 to 1,8% in 1989. This figure has since been reduced to 1,5% in 1991.

However this rather poor state of the industry has some interesting exceptions. We were surprised to find a firm (firm B) that was making some interesting organizational changes to increase its productivity (See Table 16 and Table 17 in Appendix). This firm was using a traditional track manufacturing system of production and producing shoes in 6 lines and leather upper footwear in 2 lines. This firm employed about 200 workers about 5 years ago and currently employed some 700 workers (it was increasing employment while others were retrenching). It was now producing 8,000 pairs a day of which it was exporting 3,000.

It began reducing cost by reducing stock from R350,000 four and a half years ago to insignificant levels currently. It produces only for order and orders stock to arrive each day - for each production line that produces 1,200 shoes. It uses a Just-In-Time system ordering on a daily basis. It has two main suppliers for each input with one supplying 70% and the other supplying 30% of its input needs.

Firm B has gone on to a Quick Response (QR) system with its factory going on-line with 6 retail stores. The information relayed back to the firm informs it as to the number, style, size and colour of the product sold. The firm also reduced its lead time from 4 weeks about 4 years ago to 6 days currently. Firm B had also made a major investments in new machinery of about R5 million during the past four years. It had purchased a CAD system for R350,000 to produce its own designs.

According to the production manager of Firm B, it was not making a positive return on its exports but was making a loss instead. It had to recover its losses from the higher prices it obtained from the local market - thus local sales were subsidizing exports (to the UK). The manager argued that it did this to maintain the export market and the firms production levels.

---

[17] Unfortunately we were unable to obtain the plants total turnover and number of stock turns to analyse the data further and compare with other firms, as the management was unwilling to provide this information.

[18] These two factories belong to the Amshoe Group (Jaguar and Budget Footwear.

[19] Returns are products that the retailers return for poor quality or defects. The reject rate recorded by a plant refers to products identified by quality control within the plant to be defective or of substandard quality. Rejects are scrapped or sent back to the production line to be reworked.

This firm (firm B) still had some way to go in making changes to production organization and worker involvement. While the production system still relied on a high level of job demarcation the workers were being asked to learn more than one task through learning on the job ("Learning from Nellie"). The firm had not invested in training of the workforce. When asked about whether there were any quality circles and collective incentive schemes the production manager replied that it was too early to do this yet.

While some of the changes in production organization here were clearly raising the overall efficiency of the firm, there was no apparent worker involvement. Whilst the firm did not use subcontracted labour - which it believed was not efficient and did not increase its flexibility - it employed some casual labour on short term contracts.

Thus this example does suggest a possible trend amongst the South African footwear firms towards what Victor Prochnik (1992) calls "Spurious flexibility". In his analyses of the restructuring process during the 1980s and 1990s amongst Brazilian footwear firms, Prochnik argues that there was a trend towards the co-existence of modern techniques of production and equipment together with low wages, poor working conditions, a resort to subcontracting and a relatively high labour turnover to reduce costs and avoid training workers.

2.2.3.3 Survey of Footwear Retailers in the Mid-to-lower domestic market segments.

TABLE 18

FOOTWEAR RETAILERS - MID-TO-LOWER MARKET SEGMENT

Market Segment	Sex	Price Range	Retailer
lower	Mens Ladies Children	below R49.99 below R29.99 below R9.99	PEP Stores
Mid-to-lower	Mens Ladies Children	R79.99 - R49.99 R49.99 - R29.99 R39.99 - R9.99	SCOTTS

Source: National Buyers; Pep Stores and Scotts Retail (interviews).

The main complaint of the retailers selling in the mid-to-lower segment of the market is the poor quality and high prices of locally produced footwear, compared to goods that they can buy from the East Asian countries. They also complain that local producers are guilty of irregular and late deliveries, poor product development and inability to produce for the changing fashion.

PEP Stores argued that they were able to source synthetic shoes far cheaper from China, and at higher quality. They argued that the import duties only served to prevent local consumers from purchasing cheaper shoes. Although this argument is very persuasive it should be treated with caution, as the cheaper sourcing of footwear might not be passed on to the consumer. Whilst PEP Stores appears to have a low markup, of about 40%, most other large retailers have high markups and high profits. Scotts which sells in the mid-to-lower market segment has a markup of 120%. [20]

[20] Response to our questionnaire.

Thus the argument used by retailers (ie, they have the interests of the customer at heart) to liberalize imports is often spurious.

Retailers in the mid-to-lower market segment are importing over 50% of total sales. In response to our questionnaire, Scotts, which has 160 stores country wide, stated that they source 40% of their footwear from local manufacturers, imported 10% from the BLS states, and 50% from the East (Thailand, Hong Kong and Taiwan). A large part of domestic footwear was sourced from the TBVC states. The reasons this retailer gave for importing were not only lower prices of imports but also the better quality, better and more fashionable styles, and certainty of delivery times. The latter factor was most critical. The local lead time was between 6 weeks and 3 months, and the lead time for imports was 3 months. Import delivery times were however more certain whilst the local manufacturers had a reputation for late deliveries.

2.3 South Africa is following the global tendency to shift production to lower labour cost areas

As Table 19 (see Appendix) indicates, China, together with Thailand and Indonesia, recorded substantial growth rates (of footwear exports between 1978 to 1987) of 20.9%, 31.3% and 52,9% respectively, from very low bases. In 1990, China became the largest single supplier of shoes to the US. In the same year, China accounted for 32% of all shoes imported by the USA and half of all low priced shoes (Mody et al, 1991). Over the past few years Taiwanese shoe companies have shifted between 60 and 200 operations to China (mainly to Fujian Province) where manufacturing costs are said to be 20 to 30% cheaper (see Mody et al, 1991).

In addition plans are afoot to develop a US$500 million Shoe City in Southern Guangdon Province. The centre piece of Shoe City would be a 1,5 million square foot shoe factory, fuelled by its own power plant. Surrounding it in a horse shoe formation would be some 30 manufacturers of components and raw materials. The entire complex is likely to employ some 500 000 workers, trained and managed by a team of Japanese and under an arrangement with the Guangdong government paid 32 cents an hour (Mody, et al, 1991). Whether this plan succeeds or not is uncertain, but it is a measure of the distance China has covered in the production and exports of footwear for the lower end of the global market.

South Africa has lost the race in this segment. While other countries racing ahead and building their competitiveness and manufacturing efficiency South Africa was protecting its industry and maintaining inefficient ("rent seeking") management and outdated techniques of production (Hadjimichael, 1990).

Even those countries which were major exporters of footwear at the low end of the global markets are relocating production to lower labour cost areas. Taiwan and South Korea have begun to relocate the more labour intensive and lower value added parts of footwear production to China, Thailand and Indonesia and Vietnam (Hadjimichael, 1990).

TABLE 20

WAGE RATES IN US DOLLARS/MONTH

China	50
Thailand	90
Indonesia	40
Mexico	220
South Africa*	300
Korea	700
Taiwan	600

*approximated from interviews with firms
Source: World Footwear (Oct/Nov 1992)

As Table 20 above suggests it is China, Thailand and Indonesia that South African footwear producers (in the lower end of the market) should be concerned about. Wage levels here are clearly far below South African levels - even below those in the TBVC states.

As China, Thailand and Indonesia become major suppliers of imports to South Africa at the lower end of the market, the very low cost of labour there will make it impossible for South African producers to compete in this segment. Already there has been a trend towards relocating in the lower labour cost areas of South Africa and Southern Africa.

TABLE 21

PRODUCTION WITHIN THE INDUSTRIAL COUNCIL AREAS, IMPORTS AND THE 13 "STATES" PERCENTAGE SHARE (IN TERMS OF NUMBERS OF PAIRS) OF TOTAL MARKET

Year	Within I.C.	Imports	13 "States"
1984	66	30	4
1985	72	20	8
1986	69	19	12
1987	63	22	15
1988	64	16	20
1989	63	11	26
1990	58	13	29

Source: S. Davidson, 1992

TABLE 19

BREAKDOWN OF PRODUCTION IN THE 13 "STATES" 1990

	Pairs	Employees
1. BLS countries	7.10m	1968
2. TBVC independent States	8.16	4871
3. Self Governing National States	12.42	3920
Total production	27.68m	10759

Source: FMF Digest, No. 2, 1991.

Globally there has been a clear trend of production to shift to lower cost regions of the world, namely, from Western Europe and the USA to East Asia and Latin America. South Africa displays the same tendency. The output of production has shown an increasing tendency to shift to the lower labour cost regions of the country. Output has moved from the Eastern Cape to Natal (see TABLE 3 above); to the Self Governing States, that is, Qwa Qwa and Kwa-Zulu (where wage rates are less than half those in the main centres); and to the TBVC states (ie, areas outside the Industrial Council), where wage rates are up to a quarter of that in the main centres of South Africa (See Table 21 and Table 22).

Whereas the so called 13 "states" only produced for about 4 percent of the South African market, by 1990 they produced 29% (see Table 21). In addition an increasing share of this production is shifting to the BLS States where wages are lower and Unions are weak. With the reduction of import tariffs this trend is likely to continue more rapidly in the next few years.

The largest shoe factories producing lower value shoes are now located in the TBVC states and Lesotho (mainly the Amshoe Group). The Futura group has located most of its large factories (producing at the lower end of the market) in rural Kwa-Zulu. One major company interviewed is even thinking of locating some of its production to Zimbabwe.

When formulating a policy for the footwear sector we are confronted with this inexorable trajectory of the lower end of footwear production. It is clear that as this trend continues the local production of footwear for the lower end of the market will be reduced to insignificant levels and we will have to rely increasingly on imports of footwear for the poor. The following questions will need to be discussed when formulating a policy to restructure the industry: Will the poor benefit more by allowing the imports of lower valued footwear? Should we leave the supply of basic needs to imports? What about the employment and foreign exchange effects?

3. South Africa's Competetiveness at the Mid-to-Upper end of the Global Footwear Market

In this section we distinguish between the concepts comparative advantage and international competitiveness. We define comparative advantage as pointing to potential success in international markets whilst international competitiveness is achieved when we are already experiencing export success. We argue that South Africa has a potential comparative advantage in the production of footwear in the mid-to-upper ends of the world global markets. However we argue that there is scant evidence that South African footwear manufacturers are taking advantage of this potential (reflected in low levels of exports).

In section 3.1. we assess South Africa's potential comparative advantage. In section 3.2. the international competitiveness of South Africa's footwear sector in the mid-to-upper ends of global markets is assessed.

3.1 Assessing South Africa's potential comparative advantage in the production of footwear in the mid-to-upper ends of the world global markets.

Our investigations suggest that South Africa is competitive in its domestic market for footwear produced for the mid-to-upper end of the global market (see Table 10 above)[21] or in leather footwear. Put differently, we are competing successfully against imports in the mid-to-upper ends of the global markets or in leather footwear.

The evidence for this proposition is discussed in section 3.1.1. and 3.1.2. below:

3.1.1 Imports of leather uppered footwear

The percentage of imports for leather uppered footwear is relatively low.[22] Leather uppers and outer soles constituted only 3% of total imports of footwear in 1986 and leather uppers, rubber and plastic outer soles constituted only 2,4% of total imports in 1986 (see Table 3 above).

3.1.2 Retailers in the mid-to-upper end of the footwear domestic market

Our interviews with two major retailers (Truworths and Markhams)[23] at the mid-to-upper end of the domestic market (see TABLE 24 below) revealed that they imported under 20% of their total sales. Of the 20% imported a large percentage was made up of fashionable canvas and synthetic shoes. The percentage of leather uppered footwear imported was very small.

TABLE 24

DOMESTIC MARKET

Market Segments	Sex	Window Price	Retailer
mid-to-higher	Mens,Ladies	R110.00	Truworths
mid-to-higher	Mens	R150 - R200	Markhams

Source: Interviews

---

21 Out of Total Imports of Footwear in 1986 less than 6 % constituted leather uppered footwear (see Table 3 above).

22 The leather content of footwear is a good indication of its value. Those retailers selling at the mid-to-lower end of the market have a 70-80 % synthetic content and only 20-30 % leather (eg, Scotts Retail). Those that sell at the mid-to-upper end sell mainly leather uppered footwear.

23 Truworths has 270 stores in South Africa and Markhams has a total of 120 stores, according to our interviews.

TABLE 25

GLOBAL MARKET

Market Segments	FOB Price
Medium	US$6-10
High	US$11-20
Very high	US$20+

Source: Hadjimichael, 1990

The f.o.b. price does not include transport and tariff prices. In addition the markup prices of wholesalers and retailers have to be added. In the USA that of Importers/Wholesalers are 30% and the retailers add another 60-65% (Hadjimichael, 1990). South Africa's retailers in the medium to higher segments have markups of between 120-180%.

It is interesting that both the major retailers we interviewed rated the quality and suitability of the South African product for the mid-to-upper levels of the domestic market as being reasonable to good.[24] It is interesting that Markhams (105 stores) which sells at the upper end of the market (R150 - R200) only imported 5% of its sales, whilst Truworths (270 stores) - whose average window price was 110 - imported 20% of its sales. However both the retailers recorded figures of 3% for the percentage of shoes that they returned to the manufacturers for defects. Both the retailers surveyed did not complain about the tariff rates (30% for leather uppered plus 15% surcharge). In fact one of the retailers (Truworths) argued that they preferred to buy from the local manufacturers as they could order on a monthly basis rather than order in 6 monthly blocks from foreign sources.

This view of retailers is very different from those of retailers at the mid-to-lower end of the domestic market who complained mainly of poor quality, poor and irregular delivery times and high prices. In contrast to retailers at the lower end who argued the need to increase protection by introducing import quotas, retailers at the mid-to-upper end were not too concerned with liberalizing our import barriers.

Thus South African Manufactures in the mid-to-upper levels of the Global markets appear to be competitive domestically (by competing successfully against imports) but not internationally (very low level of exports). The discussion above thus points to our potential comparative advantage in the production of leather uppered footwear.

There are several other factors that suggest that South Africa has a potential comparative advantage in the mid-to-upper ends of the footwear global markets.

These factors can be summarized as follows: (See Levy (1992) for a fuller discussion of the S.A. Garment industry which exhibits very similar characteristics).

(i) Labour costs are cheaper.
(ii) Availability of raw materials - even exotic leather.
(iii) Infrastructure.
(iv) Design, technology and access to foreign markets.
(iv) Size of domestic market.

---

[24] This does not necessarily mean that their standards are the same as export markets would require from local producers.

3.1.2.1 Labour costs are cheaper.

Before discussing the cost of South Africa's labour with its competitors in the mid-to-upper ends of the global footwear markets, we need to ascertain who our main competitors are in this segment of the market. We undertake a brief overview below of the changing trends in global production and trade of leather footwear to ascertain which countries will be our likely competitors in the next few years.

Who are our competitors in the mid-to-upper levels of the Global footwear markets?[25]

Changing trends in the production of leather footwear

Global trade in leather footwear has increased rapidly since 1970 (see TABLE 26 in Appendix). Although the industrialized countries still remain the major producers of leather footwear their share of world production has fallen dramatically since 1970 (see TABLE 27 in Appendix). Some developing countries (Brazil, China, India, S. Korea. Taiwan) have shown remarkable increases in leather footwear production since 1970. In sharp contrast South Africa's production has fallen between 1970 and 1990.

South Africa's production of leather footwear is strikingly poor in comparison with that of low wage industrialized countries (especially Portugal and Spain).

Whilst most developing countries in Table 27 increased their production of leather footwear, South Africa's production fell from 29.9 million pairs in 1970, to 21,8 million in 1990 (a negative growth rate of -1,6). Portugal expanded its production from 17,6 million in 1970 (below the figure for South Africa) to 96,4 million in 1990. Brazil too produced slightly below South Africa in 1970 (27,1 million) but increased its production to 257,6 million in 1990. The performance of the East Asian tigers have been dramatic by comparison. South Korea increased its production from a low base of 10,7 million in 1970 to 214 million in 1990 whilst Taiwan too started from a similar low base increasing its production to over 100 million in 1989 (World Footwear, Oct 1990).

Changing trends in Trade and Exports of leather footwear

Twenty years ago Italy and Spain claimed over half of world exports, and trade in leather footwear was confined to a few very rich western countries (see Table 26 in Appendix). This situation has changed dramatically. Brazil, China, South Korea and Taiwan have over two-fifths of the world's exports while the share of industrialized countries has declined.

Table 26 reveals that Italy remained the world's largest exporter with a modest growth rate of 1.8% per year between 1970 and 1990 and a falling trade share from 43,2% to 19,9% in the same period. Exports from the leading developing country exporters, South Korea, Brazil and Taiwan, grew by 17,5, 24,1 and 18,5% per annum respectively increasing their share of world exports dramatically by 1990. Spain and Portugal were the next largest exporters with Portugal's performance being the most spectacular of the two Iberian countries.

Portugal recorded a growth rate of 16.4% and increased its share of world exports from 0,8% in 1970 to 5,6% in 1990. China and Hong Kong lead next by increasing their share of world exports from 0,4 and 0,3% to 3,4 and 3,2% respectively between 1970 and 1990. Two other countries which do not command a large share of the world market but have shown substantial growth rates from a low base are Thailand and Indonesia whose exports grew at the rate of 31,3% and 52,9%, respectively, during the period 1978 to 1987.

---

[25] For a detailed discussion of the Global leather footwear markets analysing the changing production, trade and market differentiation in leather footwear, see Ismail 1992, Chapter Three.

TABLE 28

COMPARISON OF AVERAGE WAGE LEVELS - 1992. SOUTH AFRICA, UK AND OTHER COMPETITORS IN THE MID- TO-UPPER ENDS OF THE GLOBAL FOOTWEAR MARKETS

Country	Average Weekly Wage
South Africa	R250
United Kingdom	R850
Taiwan	R420
Korea	R490

Sources: Interviews; BFMF; World Footwear Markets, Oct./Nov. 1992.

Table 28 above indicates that South Africa's wage costs are almost half that of the South Korea and about 40% lower than that of Taiwan (two East Asian NICs who are major exporters of footwear in the mid-to-upper end of the world footwear markets). When compared with the UK (an industrialized country producer of leather footwear) South Africa's wage levels are found to be less than one third that of the UK. Whilst we do not have the data to compare South Africa's wage rates with that of other major leather footwear exporters, Levy's (1992) comparison of South Africa's wage rates for the garment sector reveals that South Africa's wage rates are far below those of Italy, Hong Kong and Portugal.

TABLE 29

MAJOR COST COMPONENTS AS A PERCENTAGE OF MANUFACTURING COSTS

	South Africa (Futura)	United Kingdom (Bally)
Raw Materials	53	40
Labour Costs	8	30
Overheads	29	30

Source: Interviews

In addition the figures in Table 29 above point out that the cost of labour as a component of total manufacturing cost is far is greater in the developed countries (the main countries producing leather shoes see Table 27 above) than in South Africa (a middle income developing country). A comparison of the comparative cost of manufacturing production in a plant in the UK (Bally) and in South Africa (Futura) reveals, that while labour constitutes 30% of the cost of production in the UK plant, it

only constitutes 18% of the cost of production in the South African plant (see Table 29 above).

These figures (Table 28 and Table 29) do suggest that the very poor comparative performance[26] of South Africa's leather footwear subsector is not due to its higher nominal wage costs.

Other advantages:

3.1.2.2 Abundant Raw Materials

South Africa has an abundant supply of the basic raw material for leather footwear production ie, leather.

As we discussed above the main material input costs (40%) into the production of footwear is tanned leather whilst

Raw material constitute over 50 % of the costs of leather footwear production in South Africa (see Table 29 above). The bulk of the raw material used in leather footwear is Bovine tanned leather. South Africa has a well developed Tanning industry. South Africa has an abundant supply of bovine hides and skins too.

3.1.2.3 Infrastructure

South Africa has a highly developed infrastructure for the production of leather footwear. A large number of tanneries, component suppliers, and machinery retailers (new and second hand). All the links in the chain of production are relatively developed. This is due to a long history of leather footwear production in South Africa. The labour force has developed a significant experience in production making it possible for the diffusion of such skills to new productive units (micro enterprise in the informal sector).

The industry is largely concentrated in Natal (70%) and Cape Town (30%) which have well developed commercial infrastructure, transport links and major ports.

3.1.2.4 Industrial Districts

In addition the regional concentration of the industry in Natal and the Cape (see Table 3 above) increase the possibility for co-operation and competition amongst these firms.

3.1.2.5 Well Developed Links with Global Markets

The concentration of ownership in the industry by four large companies has ensured well developed foreign links for design and technology transfer, and marketing networks.

3.1.2.6 A Large Domestic Market

Although the size of our market is large (35 million). the size of the leather footwear market has been decreasing signifying a preference for synthetic footwear. However the size of he mid-to-upper level of the domestic market is sufficiently large and is likely to grow with a large and growing middle class.

---

[26] This is strikingly so when it is compared with the performance of South Korea, Taiwan and Brazil with which some writers (Moll, 1990, Muller, 1990; Levy, 1992) have suggested South Africa has some similarities (relatively developed middle income country).

3.2 Assessing international competitiveness in the mid-to-upper ends of the global footwear markets

In this section we begin by discussing South Africa's export capability as an indicator of international competitiveness (3.2.1). The weaknesses in South Africa's export capability are then discussed in section 3.2.2. In Section 3.2.3. the weaknesses in South Africa's leather footwear productive capacity and domestic markets are highlighted. The case studies of leather footwear firms undertaken in South Africa and in the UK are then discussed and compared (section 3.2.4.). Finally (in section 3.2.5.) we discuss the requirements for South Africa's leather footwear producers to achieve international competitiveness.

3.2.1 Export capability in this segment of the market

South Africa's exports of footwear have been very low historically with exports rising from a low base, 2% of production in 1972, to 5% in 1980 and 9 in 1990 (IDC, 1992). In 1986 footwear with leather uppers and outer soles constituted 29% of total footwear exports and footwear with leather uppers and rubber of plastic outer soles constituted 25% (see Van Wyk, 1988, 38). In value terms footwear with leather uppers and outer soles constituted 38% of total exports. These figures prompted Van Wyk to conclude that "footwear with leather uppers and outer soles seem to be the strongest export proposition"(Van Wyk, 1988, 39).

The largest percentage of our exports in 1990 have been in the "Sports footwear with uppers of leather" category - constituting 49% of total exports (IDC, 1992).

Although data for the direction of our exports are not available our interviews suggest that we have been exporting mainly to the UK and Germany in Europe with many local manufacturers beginning to break into the East European Markets (mainly Russia). Some manufactures we interviewed were exporting to Southern African countries. According to Chen we even exported leather footwear to Taiwan in 1988 (960 pairs valued at R33,000).

3.2.2 Weaknesses in export capability

Export optimism however should be treated with caution for the following two reasons:

(i) The discussion above suggests that we do have an export capability and that our competitive advantage may lie in leather uppered footwear. However this export capability is still very weak. The following facts suggest that export optimism should be cautious. The total value of our exports have been very low (IDC, 1992, 6). In 1990 the value of total footwear exports was a mere R14 million, rising from R13 million in 1989 and R10 million in 1988. The total value of imports however was a massive R141 million (IDC, 1992, 5).

(ii) A significant exporter of leather uppered footwear to the UK explained that they have been able to sell their products at a reasonable profit in the UK during 1992 when the exchange rate was favourable. However when the Pound began to depreciate in September, 1992 it caused the value of the rand to rise against the British pond thus making his exports unprofitable. This anecdote suggests that even in leather uppered footwear our competitive advantage remains very weak and vulnerable to changes in global macro-economic conditions.

Our analysis suggests that whilst we do have a potential comparative advantage in the production of leather uppered (mid-to-upper end of global markets) footwear, international competitiveness still has to be developed. This can be done by converting our comparative advantage into export success (in the mid-to-upper ends of the global

markets). This would require addressing some of the major production problems and weaknesses identified below.

3.2.3 Weaknesses in production and markets for leather footwear.

3.2.3.1 The production of leather footwear has shown a declining trend in the 1990's.

Footwear incorporating leather uppers represents 46,58% of the total footwear produced and synthetic uppers 35,33% (see Table 30 below). However the percentage of fully leathered shoe (leather uppers with leather outer soles) has fallen from 4.9% of total production (of volume) in 1985 to 3,5% total production in 1990 (FMF 1991a) reflecting a fall in higher value added production.

TABLE 30

FOOTWEAR PRODUCTION IN SOUTH AFRICA - 1990
PERCENTAGE DISTRIBUTION (OF VOLUME)

Type of Footwear	Men's & Youths	Women & Maids	Children & Infants	Total
Slippers & Wholly Moulded Footwear	4.34	5.2	3.42	12.96
Fabric Uppers/& Running Shoes with Synthetic Uppers	0.58	0.9	1.08	2.56
Leather Uppers	22.17	18.75	5.66	46.58
Synthetic Uppers	6.72	22.49	6.12	35.33
Tender Work			2.57	
Total	33.81	47.34	16.28	100

Source: FMF (1991a)

3.2.3.2 The market for leather footwear is small and contracting

Is a small mid-to-upper domestic market a serious constraint for the development of international competitiveness in leather footwear production?

South Africa's per capita consumption of leather footwear in 1990 was a mere 0,6. Its total production was 22 million and exports were insignificant. International experience suggests that this need not be a major constraint. Whilst per capita consumption of leather footwear in the industrialized countries was approximately 2.5, Brazil's per capita consumption of leather footwear in 1990 was only 0.7 and S. Korea's only 0,5. (see Table 31 in Appendix). However Brazil's export of leather

footwear in 1990 was 152 million pairs and S. Korea's exports was 193 million pairs.[27]

3.2.3.3 The view of the leather footwear manufacturers

In addition to the weaknesses in the industry discussed above the manufacturers of leather footwear we interviewed identified the following problems in the industry that will need to be addressed in attempting to develop international competitiveness.

(I) Poor backward linkages

The most important complaint of the leather footwear manufacturers is the poor quality, irregular delivery and high cost of locally produced tanned leather (interviews). Irregular supplies of tanned leather are also the cause of their high raw materials stock. This is also true for suppliers of textiles, rubber and plastic and footwear components suppliers. The latter have been discussed above and since tanned leather is the major input into leather footwear we will discuss the backward linkage with the tanning industry below. In addition leather footwear manufactures complain about the high cost of imports of better quality tanned leather (15% plus tariffs).

(II) Squeeze on profits from the forward linkages

Footwear manufactures complained that the large retailers forced them into a profit squeeze by forcing them to reduce prices. Most large manufacturers surveyed supplied 5 or 6 major retailers (up to 70-80% of production). The retailers thus wielded enormous power over them, especially during recessionary conditions. In addition the following recent phenomena intensified competition in the footwear sector, forcing them to reduce their prices in order to compete.

(a) The power of retailers reflected in the high concentration of ownership in the industry was also felt in their insistence on long credit lines of between 60 and 90 days and up to 120 days (see Shoes and Views, Vol 57, No 2, 1992, 34). The manufacturers however were only allowed between 30 and 60 days by the tanneries. This problem was exacerbated by the high returns of footwear to the manufacturer when retailers could not sell, on the pretext that the shoes were defective (interviews).

(b) The growth of large discount stores (Shoe City, Games, Footgear) which had also put a general squeeze on prices by intensifying competition.

(c) In an attempt to avoid the squeeze of their ex-factory prices, medium sized and smaller manufacturers were opening Factory Shops (thus cutting out the wholesalers and retailers from the footwear) and selling direct to the public. This was also intensifying competition.

(III) Squeeze on price by the informal sector

The rise of informal manufacturers and informal traders who had low overheads and survived on low margins have contributed significantly to the general downward pressure on footwear prices (interviews).

---

[27] Brazil's footwear consumption trend in the eighties was towards lower priced products, reflecting the recessionary conditions in the economy and the low income of the majority of the people. However Prochnik (1992) reports that during the period 1974 and 1988, despite the declining share of leather footwear production in the local market the export of leather footwear grew from 25 million pairs in 1974 to 127 million pairs in 1988.

(iv) Low productivity and a lack of training

Manufacturers complained of the low level of the workforce and low "work ethic". They argued that their attempts to restructure production by multi-skilling the workforce was meeting with resistance by the trade unions. However only one of the manufacturers interviewed (Eddels) was undertaking any serious training of the workforce.

3.2.4 Case Studies of Footwear producers in the mid-to-upper end of the market - South African plants compared with a leading U.K. plant

In order to evaluate the potential of South African firms to make the necessary changes in plant reorganization (and increased efficiency) we have undertaken a comparison between a leading World Class Manufacturer in the UK with two leading South African Manufacturers that produce for the mid-to-upper levels of the domestic market, and have already displayed some capability in exports (interviews).

3.2.4.1 BALLY - Norwich, England

Two years ago the Bally plant, (located in Norwich, England) decided to undertake a major re-organization of production in the plant. It began by targeting a particular market niche - although it normally produced men's moccasins, it switched to ladies casual shoes (80% leather), producing 60 to 70 styles in 6-7 colours for two different seasons (Spring Summer and Autumn/Winter) and 4 launches. Influenced by the work of Schonberger (1987) on "World Class Manufacturing" they hired a Boston Consultant Group to help them reorganize the plant.

They began by shifting from a piece rate system and doing away with the rigid demarcation of jobs. They retrained the middle management to become cross-functional and trained them to work with teams. They then began to change the plant layout by moving from 1 large factory organized on a traditional track system[28] to 5 mini-factories. The mini-factories were organized into cellular teams (rink system). They then began a process of employee development; training and multi-skilling the workforce, increasing their responsibilities and rewarding them for their increased effort through a team based incentive scheme. They moved to Total Quality Control (TQC) by removing the Quality department and devolving responsibility for quality to each person in the team. They then shifted to a Just-in-time system by producing to order, and ordering materials according to need.

Within a period of two years (1990 to 1992) the firm had begun to achieve significant improvements in efficiency and quality (see Table 32 in Appendix). By moving to a rink system they had saved 1,661 square metres of floor space. Raw material stocks had fallen from £1,36m to £0,65m and work in progress had been reduced from £0.49m to £0,18m. In addition the quality of products had improved by a reduced reject rate from 2,42% to 1,71% and a reduced return rate from 2,15% to 1,36%. Most significantly the firm was able to move to a Quick Response[29] system by reducing its lead time from 20 days in 1990 to 6 hours.

---

[28] Over the past two decades mechanized shoe making has been organized on a "track" system in which the progressively assembled shoes are carried on pegs and lifted from the track by operatives to perform the next operation. More recently a "rink" system has been devised in which the shoe making machines have been arranged in a horseshoe (see Ismail, 1992).

[29] The essence of Quick response is "manufacturers reducing production time so retailers can carry what is currently in demand and cut down on wasted stock" (Shoe and Leather News, April, 1989). See also Ismail, 1992, 83, for a detailed discussion.

How do South African plants compare with Bally?

In Tables 33, 34 and 35 (in the Appendix) we have attempted to evaluate the advances made by two leading factories where some organizational change was underway. According to our interviews with other analysts on the industry these were probably the leading plants in the country (Peter Buglass from the NPI). The Futura mini-plant studied appeared to be the most advanced. Futura was moving to a mini-plant system in one of its Pinetown factories.[30] Futura had begun to make these changes about four years ago. Eddels (with over 1000 workers is the second largest plant in the CONSHU group) had divided its plant into two (Plant 1 and Plant 2). Plant 2 was the model plant where it produced its higher valued shoe (men's 100% leather), and production for exports. It began to make significant organizational changes in plant 2 a year ago.

Whilst Futura had cut down its throughput time to 7 days - compared to Eddels which had a throughput time of 14 days - its cycle time or lead time was 8 weeks, far higher than Eddels - which had a cycle time of only 4 weeks (see Table 33 in Appendix). Bally in comparison had reduced its throughput time to 6 hours (its most advanced team) and its cycle time was the same (Bally produced for its own wholesalers). It is most interesting that both Bally and Futura had achieved an output of approximately 11 pairs per person. However the value of the output differed considerably with Bally shoes selling at £50-£65/70 or +R300 (window price) and Futura's selling at only R120-R160. Eddels on the other hand had achieved an output per worker of only 6 pairs, reflecting its lower level of productivity. Eddels shoes were selling at R150-R200 even though these were Men's 100% leather shoes (of a generally higher value). Bally was thus earning a higher value for its shoes.

The fact that Futura produced a similar output per person as the Bally plant (for a similar type of shoe) does suggest that South African workers can achieve internationally acceptable levels of productivity and skill. The higher value of the Bally shoe, though, is probably due to its higher work content. The internationally renown brand name also adds to the value. The window prices of the South African Shoes also are a reflection of higher markups by the large South African retailers (between 120 and 180%). Labour productivity at the Bally plant in terms of value added is thus much higher than the South African Plants.

Table 34 (in the Appendix) suggests that South Africa's footwear plants have a long way to go in materials management. Eddels plant had extremely high stock levels of raw materials (R4,5m), WIP (R3,2m) and finished goods (R1,3m).[31] Futura's mini-plant (it produced less than half the output per day that the Eddels plant) had a lower levels of WIP (R260 000) and finished goods (R520 000). By using Just-in-Time system Bally had successfully reduced its stock to insignificant levels.

The quality of the South African products can be determined by the reject rates and the rate of returns from the retailers. Futura had a relatively high reject rate (1,8%) and Eddels experienced fairly high returns (0,7%). Through using a TQC concept and making every person in the team responsible for quality improvements Bally had reduced its reject and return rate in the mini-plant studied to almost zero.

Whilst the South African plants had begun to make some progress in plant reorganization, they still used a traditional method of production and equipment. The Eddels plant still used a traditional track system to produce its footwear with very old machinery (average age of machines - 15 years) while the Futura mini-plant had begun to make some changes. Futura had a combination of the traditional track system and a modern rink system. Futura had begun to move to a cellular system of

---

[30] Futura is mainly a manufacturer producing for the mid-to-lower end of the market with most of its production in the Kwa-Zulu hinterland (it has 3 factories here employing 2000 workers). However it does have a small percentage of production in the mid-to-upper end. Its strong links with the BATA MNC clearly give it a good insight into the changing trends of organization in footwear production world over.

[31] Unfortunately we were not able to obtain the figures for total plant turnover and stock turns. Plant Managers were unwilling to supply this information. We could not therefore relate the stock levels to turnover.

production (with 140 workers) but maintained strict job demarcation and still used conveyor belts. The firm had however invested in more modern machinery (average age of machines - 4 years). The Bally mini-plant in sharp contrast had moved to a cellular system (horseshoe type layout) with 18 workers producing the entire shoe, doing away with job demarcation, and all the workers being trained to perform at least four or five functions (multi-skilled).

Thus this comparative analyses of South African and a leading British firm (practising world class manufacturing) suggests that South African firms are extremely inefficient in materials management. Both high levels of throughput time and cycle times suggest inefficient techniques of production. This reduces their ability to deliver efficiently to customers and creates high WIP.

Whilst both the plants studied reflected a concern to reduced job demarcation, and begin multi-skilling the workforce, they had made little progress in this regard. Job demarcation still remains rigid. Whilst Futura has begun to move to a rink system it has yet to devolve responsibility to the workforce encouraging them through the use of team based incentive schemes to improve quality.

International experience suggests that the most successful outcomes of plant reorganization are those which involve the workforce in the entire process, and invest in the training of the workforce (see Ismail, 1992, 84). The need to train and involve the workforce in the process of re-organization has not been clearly identified by South African firms.

South African firms produce an excessive number of styles by international standards. Eddels produced 350 styles compared to Bally's 60-70. The need to identify clear market niches in a differentiated market and develop a reputation for high quality (and developing Brand Names) has proved to be a successful strategy for footwear firms internationally.

3.2.5 Requirements for export success

According to Robert Feinblum (Executive Director of the Conshu Group), the main factors that needed attention to improve our exports were; an improvement in the quality of our products and reduction of prices (interview). This view accords with a similar realization on the part of manufacturers in the UK in the early 1980s. These manufacturers were confronted with the increasing trend in consumer markets to product differentiation and increasing pressure by large retailers to reduce prices, as they were faced with a contracting market caused by the recession (Rubery et al, 1987). Thus to compete successfully in these markets, firms had to make major improvements in product innovation and design, and improve the quality of their products. This required changes in work organization, improvements in technology and use of materials and increasing inter-firm co-operation (see Ismail, 1992 for a detailed discussion of these issues).

In addition to the above required changes a successful strategy to export and increase South Africa's international competitiveness in the mid-to-upper levels of the Global footwear markets will have to:

(i) Study the changing global markets and base its strategy on targeting particular niches and segments in these markets (see Ismail, 1992).

(ii) Encourage and assists firms to undertake major changes in the organization of production, making investments in modern technology, and involving the workforce in the development of higher quality products.

(iii) Undertake a major structural adjustment programme that adopts a filliere approach to the footwear manufacturing sector - paying particular attention to the backward linkages with the objective of providing better quality and cheaper tanned leather.

Shortage of space will not allow us to discuss the change in global markets. This been done in another study by the same writer (see Ismail, 1992). The second issue

has been discussed above and we will return to it in the policy conclusions below. In the next Chapter (Chapter Four) we will discuss the backward (tanning and hides and skins) and the forward linkages of the footwear sector (the power of retailers). The rise of the informal sector will be briefly analysed in Chapter Sevenbelow. An export strategy that does not involve the workforce is unlikely to succeed in achieving higher productivity and quality. The need for training will be discussed in some detail (in Chapter Six below).

CHAPTER FOUR

The Leather Footwear Filliere

In this chapter we will discuss the backward and the forward linkages of the leather footwear sector. The backward linkages of leather footwear production consists of the leather tanning and finishing stage and the raw materials stage, where hides and skins are recovered from dairy and draught animals or animals slaughtered for meat.[32]

In section one - on backward linkages - the tanning and finishing sector will be briefly discussed, and a more detailed discussion of the Hides and Skins subsector will be undertaken to analyse the reasons for the poor supply and quality of locally produced leather. In section two - on forward linkages - we will discuss the structure and functioning of the Footwear Retail Sector and its impact on the manufacturing of footwear (particularly leather footwear).

We will not discuss the footwear components sector or the footwear machinery sector due to the limitations of time and space.[33]

1. The backward linkages of leather footwear production (Tanneries and leather finishing - ISIC: 3231)

1.1 Trends in Output, Employment and Trade

Tanned leather has seen a gradual increase in the value of output (in constant 1990 prices) from R404 million in 1972 to R672 million in 1990. Employment too has seen a gradual increase from 3,260 in 1972 to 3,970 in 1980 and 4,820 in 1990.

For Tanneries and Leather Finishing exports have increased from R94 million in 1972 rising to R188 million in 1984 and then falling rapidly to R136 million by 1990. Imports however has maintained its steady increase from R19 million in 1972 to R29 million in 1981 and R216 million in 1990. Whilst exports have fallen from 23% of production in 1972 to 20% in 1990 imports as a percentage of domestic demand has increased gradually from 6 per cent in 1972 to 29% in 1990. The balance on the trade account has thus increased steadily from R75 million in 1972 to R174 million in 1984, falling sharply in the latter part of the 1980s to -R80 million in 1990 (IDC, Sectoral data series).

The industry was protected by 20% ad valorem on finished leather up to 1991 (BTI, 1991). The IDC 1992 estimated that the average nominal protection of the tanning and finishing sector as at May 1992 was 15% ad valorem with no import surcharges applying (IDC, Tanning and Finishing Sector Profile, 1992).

---

[32] A fuller discussion of the backward linkages in leather footwear production would have to include a discussion of Stock Breeding, and Capital Goods production for the Leather Footwear, and Leather Tanning and Finishing subsectors. However we do not have space to discuss this here.

[33] Whilst the footwear components sector (soles, insoles, heels etc) is very large (employing approximately 6000 workers and relatively well developed in South Africa (Davidson, 1991), very little machinery is produced locally with most footwear equipment and machinery imported from Italy, the UK and Germany.

1.2 The tanneries and the supply of hides and skins.

Whilst tanned leather is used for other purposes (clothing, upholstery), over 90% of the Bovine leather consumed locally is used by the leather footwear industry (Sid Cohn, 1987). The data above suggests that the local tanneries are unable to supply the local manufacturers with sufficient quantities of tanned leather. Why is this so? The major complaint of the footwear manufacturer is that the quality of the local tanned leather is inferior to imported leather. The tanneries in turn complain that the poor leather is due to the poor quality of the South African hides and skins. We will briefly discuss the capacity of South African tanneries to produce good quality leather and then discuss the Hides and Skins market to ascertain the reasons for poor quality hides supplied to the tanneries. The ownership structure of the tanneries will also be briefly outlined.

Why are South African tanneries unable to supply the leather footwear manufacturers with good quality tanned leather? There are possibly two main reasons for the poor service provide by the tanneries to the footwear manufacturers. Firstly, most of South Africa's 17 tanneries are located in the Cape (Western and Eastern). Sid Cohn suggest that the location of the industry here (they being unable to follow the footwear industry when it moved to Natal) whilst the footwear industry is located in Natal must be an important reason for the their failure to deliver on time and produce the right quality product. Secondly, the tanneries (especially the independents) themselves are only able to obtain poor quality hides (at high prices) from the Hides and Skins merchants. Again, there are two main reasons for this phenomenon - firstly, the better quality hides are exported (they can fetch higher prices, especially with the devaluation of the rand); and secondly, South African hides are generally of poor quality.

TABLE 36

HIDE PRODUCTION, PROCESSING AND EXPORT STATISTICS 1985/6

	Hides	Percentage
Raw Hides exported	751,600	26,5
Wet Blue (Semi-Processed Hide) Exported	768,585	27,0
Local Hides (Fully Processed) to leather	1,318,687	46,5
Total	2,838,872	46,5
Total Exports (Pre-leather, i.e. Raw Hides plus Semi -Processed Hides)	1,520,185	53,5
Total hides (Fully Processed) to leather	1,318,687	46,5

Source: Meat Board, see Sid Cohn, 1987

According to Table 36, over 50% of raw hides (raw hides plus wet blue) are exported and under 50% are beneficiated to the tanned leather stage. This pattern of hide exports has remained the same. In the 1990 BTI report on the industry, the Board noted that 22% of the supply of hides was exported in its raw form, and about 30% is exported in a wet blue form. Thus over 50% of South African hides are still exported, with under 50% being beneficiated into finished leather.

It is generally accepted that South African hides are of a poor quality. The reasons for this can be found firstly, in the hide auction system, which works in favour of the farmers, and does not provide any incentive for them to protect the hides in the animal from disease and damage on the farms. Secondly, the poor quality of the hide is exacerbated by the poor flaying and curing facilities of the country abattoirs.

Hides make up about half the production cost of the tanner and the volatile hide pricing system (auction) makes the tanners costs fluctuate considerably. The high cost of the hides is also due to export parity pricing practised by the hides merchants.

1.2.1 The Hide Subsidy Scheme

The Meat Board runs a levy/subsidy scheme to promote the beneficiation of Hides ie, from the Raw stage to the Wet Blue stage. The levies are extracted from the farmers and the subsidy is paid to the exporters. This has led to a greater percentage of Wet Blues being exported. Sid Cohn's Stratplan 2000 suggests that the subsidy scheme be shifted to the export of finished leather.

The problems of the tanning industry are related to a number of interrelated factors, namely; the ownership structure of the tanneries, the market for hides and skins, the functioning and control of the Meat Board and the Auction system, the role of the livestock agents (acting on behalf of cattle owners), and the curer of the raw hide, and the shippers.

1.2.2 The functioning of the Hide Market

Hide and Skins are a by-product of the production of meat and are thus totally dependant on the meat industry. In the so called controlled areas of the country (which slaughter over 60% of the cattle in South Africa), the abattoirs are all publicly owned. The Meat Board issues licences to producers and quotas to agents of the cattle owners. An agent is required to appoint a curer of the hide (so that it does not deteriorate after flaying) and the curer prepares a list of hides he expects to have on a weekly basis. In terms of the Meat Boards rules, all country hides and skins must be offered for sale by public auction before being acquired by either a local tanner or shipper. Potential buyers which include tanners and shippers (who buy mainly on behalf of overseas customers) must lodge bids directly with the curer or indirectly with the Meat Board. The curer who consults the farmer and the agent can refuse the highest bid. The curers are normally owned by the livestock agents and farmers. These livestock agents are linked to the largest tannery companies and the curers therefore ensure that their company gets the better quality hides. The curers may also raise the price by creating an artificial demand by refusing to make hides available for two to three weeks.

The system of Auctions thus works in the interests of the large tanning companies who maintain an oligopoly over the hide and skins market (Farmers Weekly, November 16, 1984). Competition amongst these oligopolists which occasionally breaks out can result in volatile prices of hides. Clearly the losers in this system are the independent tanneries, the independent shippers and the footwear manufacturers, who have to suffer higher volatile leather prices and irregular and poor quality tanned leather produced by the tanneries.

1.2.3 Ownership of the Tanneries

The large tanneries in South Africa belong to one of five main groups: Vleisentraal owns three large tanneries (King Western leathers in Wellington, King Tanning in King Williamstown and General Hide corporation in Harrismith). Vleisentraal is also the largest meat co-operative in South Africa. Silveroak industries owns four tanneries

(Mossop, Exotan, Ladysmith Leathers and Bachs tannery). Imperial Cold Storage (ICS) owns two large tanneries - Sutherlands Tannery (PMB) and Transvaal Hide and Skin Producers. Kanhym Investments and Futura own one tannery each.

Of the five major companies involved in the tanneries three are heavily involved in the Meat industry; Vleisentraal, ICS (owned by Barlow Rand) and Kanhym (owned by Malhold Limited).

It is the latter three companies that exercise enormous influence over the entire hides and skins market.

The discussion above suggests that the cause for the poor supply of good quality tanned leather lies in a number of factors; the distant location of the tanneries; the local production of poor quality hides due to lack of care in farming and flaying; the export of over 50 % of (Raw and Wet Blue) Hides; the vertical integration of the livestock (meat) industry, hides, and tanneries and the control of the hide market by a few large companies (through oligopoly pricing).

1.3 Trends in the world production and trade of leather

In this section we will undertake a brief survey of the global trends in these two segments of the global leather and footwear industry. We will then compare South Africa's performance over time with some other countries to highlight its position in the global leather and footwear industry.

Most developing country governments have been restricting the exports of raw hides and skins to enhance the production of leather. Between 1961 and 1987 the export values of bovine hides and skins for Latin America as a whole was reduced from US$56.5 million (average for 1968-1971) to US$23.8 million 1987.

In sharp contrast the figures for South Africa alone were US$9.2 million and US$45 million respectively (FAO, 1989). South Africa was exporting almost twice the total value of bovine hides and skins exported by Latin America.

The developing countries share of global production of all three types of leather in Table 37 has increased (while that of the industrialized world has fallen). The increase of heavy bovine leather has been most remarkable, increasing from 31.7% in 1975 to 44.2% in 1990.

Some developing countries have made greater gains than others from this increased share of production. The rapid increases in production of light bovine leather in South Korea (from 1.9% in 1975 to 7.5% in 1990) and both light bovine (from 1.4% in 1975 to 5.1% in 1990) and heavy bovine leather (from 2.1% in 1975 to 9% in 1990) in China has been most spectacular (see Table 37).

1.4 South Africa's tendency is towards primary goods exports

The most striking figures from Table 38 is the relatively poor performance of South Africa's leather industry particularly its production of leather footwear and its export of leather footwear. The second most striking feature is the relatively high figure for South Africa's exports of Hides and Skins both in 1980 and 1987. Whilst other countries were reducing their exports of hides and skins South Africa was increasing its exports. This is especially striking when South Africa's production of hides and skins had decreased from 3 million pieces in 1980 to 2.8 million in 1987. South Africa's tendency is clearly in the direction of primary goods exports.

Even Argentine which produced 13. 8 million pieces of hides and skins in 1980 and exported 38.6 million dollars of this reduced its exports drastically by 1987 to US$2.4 million while its production fell only slightly to 13 million pieces. Brazil did not export any of its 9.6 million pieces of hides and skins in 1980 and only sold US$1.8 million worth in 1987 whilst increasing its production to 10 million pieces. South Korea too did not export any of its 0.5 million hides and skins produced in

1980 and only exported US$0.1 million worth of hides and skins in 1987 whilst increasing its production to 1 million pieces.

Whilst all other countries increased their production of light leather from bovine animals, South Africa's increase was relatively small increasing from 38.7 million square feet in 1968-71 to 50.9 million square feet in 1987. In comparison with South Africa other country increases have been dramatic, with Brazil and Argentine doubling their production and South Korea increasing its production almost 28 times between 1968 and 1987.

South Africa has retreated even further backwards (into the lowest value added stage of the leather footwear industry) by increasing its exports of raw materials, that is, the export of raw hides and skins.

2. The forward linkages of leather footwear production

2.1 The footwear retail sector

According to Jonathan Hallows (MD Eddels) the footwear retail market is shared between two groups of retailers: 50% of the market is controlled by the large retailers and 50% by the independent retail outlets. Of the latter group a large percentage is taken up by the large number of small and medium sized Indian traders.

The large and medium sized footwear manufacturers are dependent on the large retailers. Those interviewed stated that they were dependent on the large retailers for the purchase of over 70% of their output. The new Discount Chains such as Extra Shoes and Footgear are currently absorbing the share of the footwear market that belonged to both the large retailers and the independent retailers.

2.2 Ownership of the large footwear retail outlets

The footwear retail market (outside the discount chains) is controlled by five large companies. These five companies own all the major retail chains that sell footwear. These retail chains are generally sellers of apparel (clothing and shoes) but in some cases also sell food and furniture. The five main companies (listed in the Shoes and Views Directory, 1992/93) are:

(i) Pepkor, which owns Pepstores (1000 stores) and Ackermans (125 stores);

(ii) Amrel, which owns ABC shoes(78 stores), Cuthberts (150 stores), Scotts retail (165 stores) and Select-a-Shoe (217 stores)

(iii) Wooltru Group, which owns Topic Stores (+100 stores), Truworths (270 stores), Woolworths (90 stores) and Makro (10 stores).

(iv) Edgars Group, which owns Edgars stores (+170 stores), Jet Stores (72 outlets) and Sales House (113 stores).

(v) Foschini Group, which owns Foschini Ltd (292 stores), Markhams (102 stores) and Pages Stores (152 stores).

The retail Companies also have strong links with the biggest companies in South Africa. Amrel is ultimately owned by Anglo American and Wooltru's parent company is SA Mutual.

These retail stores have been making huge profits in spite of recessionary conditions in South Africa in the past five years. For example the Profit after tax for the Edgars group increased from R39,9 million in 1987 to R150,4 million in 1991. This is a massive increase of 277% (TURP Company reports).

The bulk of the sales of many of these retailers are credit sales (eg, Edgars, credit sales accounted for over 80% of sales in 1991). The very high profits are clearly linked to the very high markups of these retail outlets - from 120 to 180% (interviews). This is very high compared to 60 to 65% for retail stores in the USA (Hadjimichael, 1991).

As we have discussed above the large retailers have increased the pressure on manufacturers to reduce their prices thus squeezing the profit margins of manufacturers. However large retailers need not play a negative role only. Their large size ensures a ready outlet for manufacturers and their knowledge of the consumer markets locally and globally could be a positive influence encouraging local producers to develop their products (and keep abreast of world fashions), and reduce cost by reorganizing production.

Some South African retailers have begun to move to a Quick Response system (Shoes and Views, various issues). Manufacturers that have to maintain these customers will be forced to reduce lead times and Work In Progress (WIP). This in turn could begin to put pressure on the local tanneries as the Manufacturers begin to adopt a Just-in-time system in response to this pressure. The increasing efficiency of the leather footwear manufacturers is likely to make local producers internationally competitive, both in terms of price and quality. The pressure of the large retailers on footwear manufacturers in the UK was the most significant factor that stimulated the reorganization of production in footwear firms (according to JIT and Quick Response principles), and led to the adoption of new production techniques on the shop floor (team work and multi-skilling) (Rubery, J., 1987).

CHAPTER FIVE

Trade Policy and Other Incentives

In this chapter we provide a brief historical overview of trade policy for the footwear industry (section 1). We then discuss the impact of increased protection on stemming the tide of increased imports (section 2) and the impact of export incentives on increasing exports (section 3).

1. Historical overview of trade policy for the footwear industry

The BTI reports that it was from as long ago as 1883 that the footwear industry has needed some protection to compete against foreign imports. The lack of skilled labour locally and the smaller size of the local market was ascribed by local manufacturers to their lack of competitiveness. In 1910 the duty on shoes was 15 % ad valorem and progressively increased to 30 % in 1923. It was only in 1946 that these duties were reduced to 25 % for leather shoes but these duties were subsequently increased in 1959. These duties were reviewed in 1975.

During 1987 the Board lifted import controls on imported footwear and introduced additional protection applied for by the FMF. In response to the FMF's application Interim Formula Duties were imposed by the Board on imported footwear in 1987. The Interim duties that were imposed amounted to 30% ad valorem on footwear imports.

In August 1991 the Board after a lengthy investigation and application by the FMF for increased protection granted further tariff increases that currently prevail (Report No. 2877). The existing formula duties were removed. The ad valorem duty on synthetic footwear and footwear with textile fabric uppers were increased to 60% (calculated on the f.o.b. value of the product ie, before insurance, shipping and transport costs), or a minimum duty of R5 per pair, whichever is the greater. These duties are to continue for a period of three years to be scaled down to 35% over the next 5 years until it reaches 30 per cent by June 1999. There was to be a 30 % ad valorem (on the f.o.b. value) duty on leather shoes. There was also a 15 % surcharge on imports.

The Board subsequently extended the duties to apply to the imports of Uppers (Report No. 2944) after another application by the FMF. These duties were 60 % ad valorem on synthetic and textile uppers and parts thereof - the duty to be applicable for three years after which it was to be reduced by five percentage points per annum to a level of 30% ad valorem. The duty of 30 % on leather shoes too was extended to uppers and parts thereof (Report No. 2944).

The footwear industry generally welcomed the increased tariffs. They had given the FMF what it had been asking for - high protection and certainty. The previous interim duties were too interim and caused uncertainty. The manufacturers producing at the lower end of the market, for example, the Amshoe Group, reported that they were now able to expand production (Shoes and Views, June, 1991). The FMF was buoyant and optimistic, arguing that, "where sanctions are being removed and the industry is able to restructure itself with the assistance of the revised duties, the South African footwear manufacturing industry could become an important player in international markets" (South African Shoemaker and Leather Review - July / August 1991).

2. The impact of increased Protection on imports

Our interviews with footwear manufacturers (during October 1992) revealed that footwear manufacturers were not as optimistic as they were in July 1991. Footwear manufacturers at the lower end of the market argued that they need additional protection to survive against the increased imports. They suggested that import quotas (QR) should be imposed limiting imports to 10% of the domestic market (interview with Roy Ecksteen, MD of Amshoe). The cry for increased protection is a recurring pattern in the industry. In June 1990, the Footwear Manufacturers Federation (at its annual General meeting (FMF, 1991b), argued that it was the reduction in protection that was responsible for the increase in imports (FMF, 1991b, 35). Now after relatively high tariff protection being granted, especially for synthetic and textile uppered footwear (of 60% plus 15% surcharge), imports have continued to increase. In 1990, 17m pairs were imported and Ecksteen predicted that some 22m pairs will be imported in 1992. Clearly the lack of protection is not the cause of the increase but the underlying lack of competitiveness (discussed above).

All hopes of exporting from this sector (the lower end) had faded by 1992. According to Mr Ecksteen South African footwear manufacturers are not even competitive in Africa, on price or quality, and their attempts (the Amshoe Group) to export to the African market had not been very successful.

Exports of leather uppered shoes were not very successful either. While exports were increasing annually, they still only constituted about 9% of total production (according to IDC, 1991). Robert Feinblum (the MD of the CONSHU Group didn't seem too optimistic about the rapid expansion of exports (interview with Robert Feinblum, Conshu Group). He argued that even though the exchange rate has been generally favourable for exporters, (since 1987?) the depreciation of the British pound against the rand had affected his companies ability to export at a profit to that country (the UK).

3. Export Incentives

The footwear industry does qualify for the GEIS export incentive scheme. This is a 19% rebate on the value of exports paid to the company after 18 months (telephonic interview with Paul Theron, from the DTI). This incentive did encourage one local producer, we interviewed, who manufactures for the lower end of the market, to export. He claimed however that his company was making a loss on the international market and recovering these losses from the local market. We were not able to ascertain the impact of GEIS on the export capability of the leather manufacturers.

CHAPTER SIX

Productivity, Human Resources and Training

In this chapter we begin in the introduction with a general discussion of the need for higher levels of training of the workforce to improve productivity (section 1). We then provide some insights into the current profile of the workforce in the industry (section 2). In section 3 the training needs of the industry are discussed.

1. Introduction

The discussion in Chapter Two of this study has pointed out that labour productivity in the industry has seen a declining trend historically. This is most starkly illustrated by the decline in the number of pairs produced by each employee annually. Whilst each employee produced 2,530 shoes in 1986, by 1990 each employee was only producing 1,945. This figure is far worse if consideration was taken of the decline in the value of shoes produced as manufacturers switched to lower valued/lower priced shoes[34], in accordance with the changing demand patterns.

Studies in South Africa (NPI, 1991) and abroad (see World Development Reports, 1990 and 1991) have shown that there is a high correlation between increased vocational training and higher levels of productivity. In addition these studies findings are that the higher the basic education of the workforce the higher the ability of the workers to benefit from the use of vocational training exercises (WDR, 1990). Indeed the success of our competitors mainly from the Far East (ie, South Korea and Taiwan) can be understood when one observes the relatively high levels of basic education of the workforce achieved there (see, Kaneko, M., 1986).[35]

2. Profile of the workforce in the footwear industry

The average number of years of schooling in the footwear industry in South Africa appears to be approximately eight years (standard six).[36] In the decentralized areas and the self-governing states where the lower value added shoes are produced, the average level of education is probably much lower.

A profile of the workforce in the industry is provided by the NPI database (1992) - this can be summarized as follows:

(i) The majority of the workforce (59%) is now female (see NPI, 1992, 14). This is unusually high compared to that for manufacturing as a whole.[37] The workforce composition was predominantly coloured (38,8%) followed by Indians (33%) and Africans (25,3%).

---

[34] For example, whilst the total output of leather uppered and leather soled shoes in 1985 was 4,9% in 1985 by 1990 this figure had fallen to 3,5% (FMF, 1991a).

[35] The high level of literacy (94.7 %) and the high percentage of (27.5) of the population with secondary education in South Korea in 1980, even compared with industrialized countries (26.7 %), is outstanding. In comparison South Africa had a literacy rate of approximately 50 % and only 13.9 % of its population had completed Secondary education in 1980 (see Kaneko, M., 1986).

[36] Joanne Sunassy's' (LIRI - Durban) estimate is that the levels of education here are similar to Textile where her study found that the basic level of education was around eight years. Her estimate is that he level of education in the footwear industry is similar (interview).

[37] In 1987 the female workforce for manufacturing was only 24% (van Wyk, 1988).

(ii) There has been a shift in the racial composition of the supervisory level. While in 1974 only 59% of the supervisors were not-white this figure has increased to 90% in 1991.
(iii) On the job training remained the most significant method of training of the operators.
(iv) The number of direct and indirect workers per supervisor had been significantly reduced from 41 in 1984 to 13,7 in 1991.

In addition, Van Wyk's (1988, 8)1 study of the industry found that Whites represent 75% of the management staff, that is, in the professional, technical, managerial, executive and administrative categories.

TABLE 39

JOB CATEGORIES WHICH ARE CONSIDERED MOST DIFFICULT TO FILL

Job Categories	Percentage of Companies
Middle Management	100
Supervisor	78
Designer/pattern cutter	71
Mechanic	28
Clicker	7
Pull-toe laster	0
Hand laster	0
Closing Machinist	0
Fitter (closing)	0
Physical Labourer	0

Source: NPI Database, 1992.

3. Training needs of the footwear industry

It is interesting that while most companies provided no training to operators (the predominant method being learning on the job), there did not appear to be a shortage of skilled operators (machinists, lasters, clickers) (see Table above).

Whilst employers complained of low productivity levels, they did not complain about skill levels. There was a general perception in the industry that there was a great deal of skill on the shopfloor (interviews). This finding was supported by the NPI study undertaken for the FITB (see below). Over 91,9% of employers stated in that survey that they felt that operators in their factories were competent.

The Footwear Industry has invested extremely little in the training of its employees.[38] This situation has been exacerbated since the government withdrew the tax rebate offered to employers for providing training to their employees. According to Arthur Wood (in charge of training at the FMF), the industry is lacking in training facilities. Those companies that did provide training provided it in a haphazard fashion without any development strategy. Only the large companies have in-house training facilities (Conshu, Amshoe and Futura) whilst the smaller companies have no training

[38] The NPI survey conducted for the FITB (see below) found that only 1,69 % of the workforce were being trained during the period March / August 1992.

facilities at all. These companies rely on two institutions that do provide some training; the Leather Industries Research Institute (LIRI), and a break away group called Footwear Institute of South Africa (FISA). LIRI has a small training centre in PE. FISA does not have any training facilities yet. Factories interviewed stated that if operators wanted to improve their skills they could do correspondence courses through LIRI.

A growing concern about the lack of training in the industry by employers (the FMF), employee bodies (SACTWU, NULW and TLTIU) and the NPI led to the formation of a Footwear Industry Training Board (FITB) during 1992. The FITB would replace the existing training committee of the FMF. An accreditation committee was set up to vet the training bodies and courses that the Board would encourage the industry to utilize. These courses would be run by existing institutions ie, LIRI and other commercial consultancies accredited by the Board. The accreditation committee recommended that the Footwear manufacturers should pay a levy of R2.00 per employee per month as from January 1993. These levies would be used by the FITB to contribute to the cost of the training provided to the industry. Plans are currently afoot by the FITB to set up a Footwear Industry Training School in Pinetown (interviews).

The NPI, which appears to be the primary mover of the concept of the FITB, has undertaken a survey to evaluate the training needs in the industry for the FITB.[39] Their survey suggests that the need for supervisory skill is a priority. They pointed out whilst senior managers in personal discussions with them were very critical of the standards of their production managers their response to the NPI survey did not reflect this. Employers were generally not satisfied with the existing training institutions (mainly LIRI). They argued that these courses were not suitable to their needs, outdated in content and design, and the training bodies use outdated machinery. The courses were not suited to the basic level of education of the employees and used English - which was not the first language of the majority of the employees as the medium of instruction.

The three trade unions in the industry have been invited to participate in the discussions that have led to the creation of the FITB and the accreditation committee. The Trade Unions (jointly) were involved in negotiations to increase their representation, from three seats (out of nine seats, the employers had six seats) to "fifty % on all structures of the FITB". In addition the tendency of the employer bodies has been to prioritize the need for supervisory and management training. SACTWU has been arguing that operator training should be given equal importance

The NPI appears to have a keen sense for the future industry training needs and has linked these to a strategy for the restructuring of the industry with a view to increasing its export capability.[40] It has identified the key priority skills as follows: marketing management skills, exporting skills, Industrial relations skills, Productivity improvement skills (example, industrial engineering), supervisory skills and strategic management skills towards exports. In addition the NPI adds two important requirements for the success of a training programme. Firstly, it argues that a performance - oriented competency - related attitude to training has to be promoted throughout the industry. Secondly, they argue there has to be a quantum shift in attitude to the relevance of skills development for a viable industry. The NPI appears to be a positive and competent resource that has a reasonably good vision of where the industry should be going in the field of training.

---

[39] The findings of the survey conducted by the NPI for the FITB is produced in a report called "Survey of Training of Operatives"(October 1992).

[40] These proposals of the NPI are to be found in the NPI report to the FITB called "Draft of Proposal to Footwear Manufacturers' Federation (FMF) Council"

CHAPTER SEVEN

The Rise of the Informal Footwear Sector

This chapter begins (in section 1) by discussing the increasing share of footwear production being taken up by the informal sector. It then presents a case study of an informal footwear producer in section 2. In section 3 the practice of informal manufacturing of parts of footwear and subcontracting are discussed. Finally we discuss the growth of informal trading of footwear (in section 4).

1. The increasing share of production of the informal producers

Due to time constraints, this study has not benefited from detailed interviews with informal manufacturers. It is based on interviews we conducted with the large manufacturers and some interviews of informal and small enterprises. In numerous interviews with managers of footwear factories they expressed their concern about the rise of informal footwear manufacturers and informal traders.

There have probably always been informal manufactures of footwear in South Africa,[41] although the size of informal sector producers has increased considerably in the last few years. This follows a trend of a consistent fall in employment in the formal sector (within the IC areas) - from 27 000 in 1989 to approximately 22 000 at the end of 1992.

Estimates of the number of shoes produced (nationally) in the informal sector conducted by footwear suppliers put the figure as high as 40 000 pairs per day (ascertained from interview with Peter Buglass from the NPI). This would suggest that over 10 million pairs per annum of footwear are being produced - about 20% of total production![42] Joanne Sunassy from the Durban office of LIRI says that her rough estimate is similar to this figure (interview).

"Small producers run parallel operations in the formal sector and informal sector" (Joanne Sunnassy) - Most employers we interviewed were very aware of this practice. One employer of a large factory (in Durban) stated that some of his workers worked a double shift. They went home with some of his footwear parts (including lasts) and produced at home, either for themselves or for a small backdoor enterprise. This practise was confirmed in an interview (in Pietermaritzburg) we conducted with a worker who was producing footwear in his back-room. He had just been fired from a small factory for allegedly stealing parts of footwear. This worker informed us that he knew at least 10 other workers currently employed in the formal sector who also produced at home.

"Small producers run parallel operations in the formal sector and informal sector" (Joanne Sunnassy) - Most employers we interviewed were very aware of this practice. One employer of a large factory (in Durban) stated that some of his workers worked a double shift. They went home with some of his footwear parts (including lasts) and produced at home, either for themselves or for a small backdoor enterprise. This practise was confirmed in an interview (in Pietermaritzburg) we conducted with a worker who was producing footwear in his back-room. He had just been fired from a small factory for allegedly stealing parts of footwear. This worker informed us that he knew at least 10 other workers currently employed in the formal sector who also produced at home.

[41] These were mainly small producers who produced leather sandals sold at flea markets or rubber sandals made with old tyres sold to the poor. The size of this sector has however been insignificant.

[42] Only 52 million shoes were produced by the formal sector in 1991.

What are they producing? The back-room producer in Pietermaritzburg was producing leather uppered ladies and children's sandals with PVC soles. The leather was purchased from a local tannery in PMB and the soles from a footwear component supplier. The majority of informal producers appear to begin with leather sandals (leather uppered with Synthetic or leather soles) (interview). They then move onto mens leather uppered moccasins. This process in the progression of manufacturing development was confirmed in a subsequent interview (with TESSA footwear - discussed below). A manager of one of the tanneries (Edendale Tannery) we visited in Pietermaritzburg told us that he sold more than 50% of his tanned leather to a large number of informal producers of leather footwear. The manager of the tannery reckons that most of these customers produced leather sandals.

To what extent have they graduated? Can they become viable small enterprises? A case study of a small enterprise might be suggestive of the possible trajectory of some of these informal producers.

2. The case of Tessa Footwear

When Kronies Footwear in Pinetown closed down 4 years ago four of their retrenched employees put together their resources, acquired some second hand machinery and began to produce sandals. They worked for 5 months without taking a salary.

We interviewed one of the partners of this enterprise, called Tessa Footwear, which is now housed in the SBDC Industrial Park in Chatsworth. He stated that between the four partners they had 53 years of experience in the footwear industry. They now produced ladies and children's fashion shoes with synthetic suede uppers. They had acquired machinery over the past four years which was currently valued at approximately R45,000.

They employed 18 workers (excluding the four partners) and produced an average of 400 pairs of shoes per day at an ex-factory price of R18,55 per pair. These shoes were sold mainly to the smaller retailers in Durban. They sold about 35 % of their production to the informal hawkers, who purchase for cash.

Future possibilities?

They claimed that they could start producing leather uppered shoes, although the price of raw material made them reluctant to do this. However, the manager believed they had the design skills to produce their own designs. They currently imitated the current fashion (reverse engineering). He argued that because they were small their productivity was higher. They were beginning a programme to multi-skill the workforce.

3. Informal manufacturing of parts of footwear and the practice of subcontracting

Subcontracting of the parts of the production process in the footwear sector takes different forms:

3.1 Subcontracting of the closing section

The economic rational for subcontracting outwork is that it removes a critical management bottleneck - the closing room - from the footwear production process. It

also hides the external flexibility of firms, that is, their ability to adapt to cyclical variations in volumes of sales (Prochnik, 1992).[43]

Stratplan 2000, designed by a business consultant, Sid Cohn, created a number of small subcontractors (about 7 such units were created) in an attempt to reduce the cost of production. These CMT firms are located in the SBDC buildings (only 4 have survived). We visited two of these surviving enterprises housed in the SBDC building in Chatsworth. Both firms were doing reasonably well and had expanded to include a smaller second operation.[44]

However, these subcontracting units are not all creatures of Stratplan 2000 - subcontracting enterprises have been operating long before Sid Cohn's Stratplan 2000; he simply sought to expand this phenomenon. Almost all factories we visited stated that they subcontracted some work to small subcontracting units which operated in different forms and sizes all over the Natal region.

3.2 Subcontracting of labour intensive activities

The large firms subcontract the closing (this is mainly the sewing together by hand of uppers) and lacing of the uppers to Agents who hire workers on a piece rate system. This work is done at various locations - at workers homes, outside bus ranks, in a room rented by the agent, and by welfare organizations. Most observations suggest that there is a high incidence of this practice. Workers (mainly women assisted by children) are engaged to do this both in the urban and rural areas of Natal. Eddels, in Pietermaritzburg, which employs 1500 workers, estimates that it employs another 1500 - 2000 outside the factory.

This points to the possibility that a very large percentage of the labour farce employed in leather footwear production are employed as outworkers, subcontracted to large firms, via agents. This evidence on informal manufacturing of parts of shoes suggests that a more accurate estimate of the incidence of informal footwear manufacturing is higher than the currently accepted figure of 20%, and could well be between 30% and 50% of footwear production. The very high percentage of women engaged in the practise of outwork and subcontracting of closing, increases the percentage of women employed in the industry, from a high of 59 percent, to over 75% of the total workforce.[45]

This practice (outwork and subcontracting of the closing and labour intensive parts of manufacturing footwear) is very common internationally (see ILO, 1992).[46] A survey of eight footwear factories in Southern Brazil found that footwear firms strived for flexibility by resorting to workshops for stitching, and in some cases, for the cutting, assembly and finishing of footwear (ILO, 1992, 123). In five exporting firms surveyed, the percentage of sewing work put out to workshops was about 15 per cent in two firms, and 25%, 40%, and 80% in the remaining three respectively (see ILO, 1992). This trend appears to be similar to that practised in the South African footwear firms.

---

[43] These workshops also serve to reduce labour cost of the large companies as they avoid their contribution of social, security costs.

[44] We visited small subcontracting plants established by Stratplan 2000; Reddy's Footwear and Justerini Footwear.

[45] Our estimate is that many large firms employ (through the practise of subcontracting and outwork) almost 40 % of their total workforce outside the factories (interviews).

[46] This practise is found in Mexico, Brazil, Spain, Cyprus, Turkey, Italy and Portugal (ILO, 1992).

4. Informal trading of footwear

There has also been a growth of informal traders. These traders compete with some of the large retailers and the small traders in the formal sector. Our interviews with PEP Stores (National Footwear Buyer) revealed that PEP stores did regard these small informal traders as a source of competition (however insignificant they might be). Small informal retailers we interviewed at the Durban Beach Front were selling ladies and children's shoes (synthetic) at a low price of R10 a pair. Informal retailers were also affecting the custom of the small formal retailers. At a recent CBF meeting, small retailers in Durban complained that these informal retailers often sold their products just outside the formal shops and competed for their customers.

The shoes are sourced at low prices. One hawker told me that he purchased his shoes from anywhere he could get it cheaper; factory shops, small manufacturers. He currently sourced his shoes from a manufacturer who had closed down (to relocate to Botshabelo). He also purchased shoes from factory returns (from large retailers).[47]

[47] These retailers often returned these shoes to manufacturers on the basis that the shoes were rejects. The real reason often was that they couldn't sell them.

CHAPTER EIGHT

Institutions

The Footwear industry appears to be highly organized. Being a very old industry in South Africa it has many well developed and long established institutions. This can be a source of great strength to the process of restructuring the industry. It can also be a source of stagnation as old institutions become steeped in tradition and unwilling to confront the new realities and challenges of international competitiveness. We discuss some of these institutions below.

1. The Trade Unions

The industry has a long history of Trade Unionism. Currently there are three unions in the Industry; the dominant union is The National Union of Leather Workers (NULW), SACTWU is still the minority union with the majority of its members based in Pietermaritzburg and Botshabelo, and the much smaller and regionally based Transvaal Leather and Tanning Industrial Union (TLATIU). None of the Unions have yet been involved in any significant discussions of restructuring in the Industry. The General Secretary of the NULW explained that they were still too busy restructuring and democratizing the Union from its TUCSA style conservatism, to give much attention to restructuring the industry.

However, all the unions were currently involved (and represented in) with the newly formed Footwear Industry Training Board, and are formulating proposals as to the skills needs of the industry. The unions are demanding a full partnership on the board; 50% employer and 50% employee. This, I would suggest, is a good starting point to begin to discuss the need to restructure the industry. As the NPI has stated in its report to the FITB, a training programme for the industry will not succeed unless it is part of a broader Industrial Strategy for the Industry as a whole.

There is a well developed National Industrial Council with Regional Structures that represents both employers and employees in the Industry. There is, in short, much experience gained by the dominant union; in industry wide collective bargaining (on issues such wages and working conditions) and a strong tradition of negotiation. SACTWU's experience, gained in the relatively advanced Clothing and Textile restructuring process, is likely to make its contribution to the restructuring of the leather footwear industry extremely valuable.

There has however already been some attempts to restructure the footwear industry (Stratplan 2000) and the experience gained here must be used to re-invigorate the process. The major short coming of the previous attempt at restructuring was the lack of Union involvement in the process. However a major step forward was achieved with the formation of LAFIA (Leather and Footwear Industries Association), in bringing together interest groups who had sharply conflicting short term interests.

2. The Employer Bodies

LAFIA is the body that was formed by the LIRI, to implement Sid Cohn's strategy for the leather and footwear sector. LAFIA was formed in 1986 to attempt to develop an integrated approach (the whole pipeline) to the industry's problems, from hides to finished shoes. The founding bodies of LAFIA include the FMF, the S. A. tanners Association, the Footwear Components and Suppliers Association, the Wattle Bark Industry, the S.A. Hides and Skins Curers/Brokers Association, the S.A. Hides and Skins Shippers Association, the Synthetics Association and LIRI (BTI, Report No. 2877).

3. Research and Training

Research and Training in the Industry has been undertaken by The Leather Industry Research Institute (LIRI). The institute is based at Rhodes University and is currently primarily involved in technical and science based research in the tanning industry (telephonic interview with Director). It has done very little training recently and its courses have been criticised as being out of date with the current needs of the industry. The newer institute, the Footwear Institute of South Africa, FISA (a break away for LIRI), is currently playing an active role in the process of developing the FITB (although it has very little resources of its own). The formation of the FITB is being actively encouraged and supported by the NPI Footwear Unit. The latter institution is an excellent source of data on the industry's productivity performance since the 1974. It appears to have a keen sense of the training needs of the Industry and can play a valuable role in assisting the industry to restructure.

4. Consultants

The efforts of Sid Cohn's business consultancy (Strategic Process Consultants) in undertaking a major study of the Industry has amassed enormous knowledge about the leather footwear filliere (or pipeline) and its functioning. This is an important resource that any future industrial restructuring process can draw on.

5. The State

The institutions of the State that we visited and interviewed appear to have little expertise or interest in the footwear sector. The DTI had one person working only part time on the industry. Both the BTI and the IDC did not have a person working on the Industry currently.

There does not appear to be a leading force for change in the industry. If the decline of the industry is to be halted and a more sustainable strategy for the industry is to be developed then the Trade Unions together with the FMF will have to begin to take the initiative and seek the assistance of the future democratic state to assist.

CHAPTER NINE

Conclusions and Policy Proposals

The introduction to this chapter begins by presenting an analyses of the crises in the footwear industry (section 1). In section 2 the main research findings of this study are presented. Section 3 discusses the policy proposals recommended to transform South Africa's current potential comparative advantage in the footwear sector into international competitiveness.

1. Introduction

The South African Footwear industry is in a severe crises. The industry has been declining with negative growth (of -0,6% in Output between 1982-1990 and -0,9% in Employment between 1981-1990) being recorded since 1981. Between 1991 and 1992 output is widely expected to fall by 20%. The effect on employment has been dramatic. Between 1989 and 1992 employment will have fallen by almost 25%, that is, from a workforce of 27,535 to approximately 22,000 - a loss of almost 5,500 workers.

These figures obscure a more interesting trend of a shift in production from the Industrial Council areas of South Africa to the "Homelands" and the BLS states (ie, the 13 "states", see Table 3 above). Total output of footwear, including the BLS states and the "homelands" for the period 1985 to 1990 increased from 62,739,000 pairs to 81,959,000 pairs. Thus the 13 "states" share of the total footwear market (in volume terms) has increased from 8 percent in 1985 to 29 percent in 1990.

Our analyses of the footwear sector has revealed that the key cause of the declining output levels and employment (in the Industrial Council areas of South Africa) lies in the low and declining levels of investment in both capital stock (plant and machinery) and training. The analyses in Section One (above) points out that leather and footwear's share of capital stock (of total manufacturing) has declined from 0.6% in 1972 to 0.3% in 1980, and remained static until 1990. Whilst the capital / labour ratios for manufacturing as a whole has increased it remained almost static for leather and footwear between 1972 and 1990. Investment in training has been low historically, and almost insignificant recently, giving rise to a pattern of low and declining levels of labour productivity. This reflects an overall pattern of declining investment for labour intensive activities in South Africa (Levy, 1992, Kaplinsky, 1992).

The second important cause is related to the pattern of increasing protection, growing inefficiency due to poor management of materials and labour, increased lack of competitiveness reflected in increased imports and renewed calls for protection. The footwear industry has been highly protected since 1883. With the removal of import controls in 1987 additional protection was introduced (interim duties of 30% ad valorem). Increasing calls for protection saw these tariffs go up again (to 60% ad valorem for synthetic and textile uppered footwear and 30% ad valorem for leather uppered shoes) in August, 1991. With increasing imports of lower valued shoes in 1992 footwear manufacturers at the lower end are calling for the imposition of import quotas!

The rapid decline of the footwear sector should be of concern to policy makers who want to encourage the development of labour demanding sectors of the economy (such as footwear) in order to address the growing and very high levels of unemployment in South Africa. Clearly, the trend of rapid decline in the industry cannot be arrested or reversed, without major new investment in new machinery, plant and equipment. However investors will be reluctant to invest in a declining

industry that apparently has no future. Recourse to increased trade protection is no solution, and instead will continue the vicious circle of increased protection, inefficiency, increased imports and more protection. Thus, what is needed is a clearly defined industrial strategy that is based on an analyses of our current comparative advantage and future international competitiveness. Trade and investment policy, then, rather than being ad hoc and "rent seeking", can be based on the development of a particular segment of the industry that has the most potential to become internationally competitive; thus giving rise to a virtuous circle of increased growth, profitability and higher wages.

2. Research findings

2.1. South African footwear producers producing at the lower end have become uncompetitive

Internationally footwear producers are extremely sensitive to labour cost increases, and production has shifted to lower cost regions, ie, from Western Europe and the USA to East Asia and Latin America. South African footwear manufacturers producing at the lower end have been exhibiting the same tendency, as our relative (to other countries) labour costs have increased. These manufacturers have begun to relocate their plants; from the eastern Cape (in the 1950s) to Natal (in the 1970s); and to the Self Governing (Kwa-Zulu, Qwa-Qwa) and TBVC states, in the mid-to-late eighties (see Table 17 and 18). In the early 1990s, production of footwear at the lower end is shifting rapidly to the BLS states, and is likely to move even further into other Southern African States

Taiwan has been the main source of South Africa's imports of lower valued shoes in the late eighties (see Table 15). The fact that Taiwan's wage rates are double that of South Africa (Table 20) means that labour cost have not been the main reason for South Africa's uncompetitiveness in the production of footwear at the lower end, in the late eighties. The reasons for South Africa's inefficiency in this sector must lie in low levels of investment in machinery and equipment, poor management of materials and labour, and the higher domestic cost (example, the cost of PVC is almost twice that of international prices) of raw materials. The almost complete lack of investment in training of the workforce has resulted in low and declining labour productivity levels.

The aggressive entry of China (with current wage levels that are one sixth that of South Africa's) into the world export markets in the late eighties and early 1990's (and it now being the dominant source of South Africa's footwear imports at the lower end) has meant that South Africa has lost its ability to compete (in the domestic market) at the lower end of the footwear market. Continued production here will require extremely high and unsustainable protection levels (import controls). In addition, this policy of high protection will deny the supply of cheaper footwear through imports from China and other East Asian Countries to South Africa's poor consumers. However, measures should be put in place to ensure that the benefits of cheaper imported footwear is passed on to the consumer and not eroded by the high markups of the large retailers.

2.2 South Africa's potential comparative advantage lies in the production of footwear for the mid-to-upper end (leather footwear) of the global footwear markets

The reasons for the above conclusions are as follows: Whilst the cost of materials are similar world over (international prices) the cost of our labour is far lower than that of the developed countries (the Southern European countries are still the major exporters here, see Table 26) and even lower than the East Asian NICs who are significant suppliers of leather footwear to the Global (mid-to-upper) markets (see

Table 20). We have argued that South African producers are internationally competitive in the domestic market for leather footwear. The reasons for this argument are found in the fact that the percentage of footwear with leather uppers that have been imported by local retailers have been consistently low (see Table 3). This trend was confirmed by retailers at the mid-to-upper end of the domestic market who stated that their imports of leather uppered footwear has been very low (less than 20%).

Although South Africa's exports of leather footwear has historically been very low - the recent (since 1988) increase in exports (still at about 9% of production according to IDC Sectoral Data Series)[48] is probably due to favourable macro-economic conditions (low exchange rate making exports more profitable) - the following six factors do suggest that we have a strong comparative advantage in the production of leather footwear for the mid-to-upper levels of the global footwear markets.

Firstly, South Africa's labour costs are almost one third that of the developed countries (the UK) and almost half that of the East Asian NICs (see Table 28). Secondly, South Africa has an abundant supply of basic raw materials for leather footwear production (mainly leather produced from Raw Hides, a by product of Red Meat production; and exotic skins, eg, crocodile skins). Thirdly, there is a well developed infrastructure of tanneries, component suppliers, and machinery suppliers in South Africa. In addition there is a well developed skill base amongst the labour force, accumulated over a long history of leather footwear production. Fourthly, the high concentration of the industry in Natal (about 70%) and the Cape, increases the possibility of cooperation and competition amongst these firms. Fifthly, the relatively high ownership concentration of the industry by four large companies has ensured well developed links with foreign markets, for access to design technology and marketing networks. Sixthly, although the size of the market for leather footwear is relatively small this segment of the market is sufficiently large, sophisticated, and fashion conscious to test the quality of locally produced leather footwear for export.

3. Policy Proposals

This section will discuss what is required of South African Manufacturers, Trade Unions and the State to turn this potential comparative advantage (discussed above) into international competitiveness? What policies are required to advance the above strategy?

3.1 Improvements in quality and cost through re-organization of production at the firm level

Whilst we do have a potential comparative advantage in the production of leather footwear, international competitiveness of local producers in this segment of the market can only be developed by addressing the following problems:

Firstly, South African leather footwear manufacturers produce an excessive number of styles by international standards. Local manufacturers need to develop a strategy to target particular niches in global markets, and attempt to develop their competitiveness in those products through product improvement and quality. Secondly, there is a serious need to improve the quality of our products, and reduce the cost of production.

Our comparative study of two South African leather Footwear manufacturers with a leading British Company, adopting World Class Manufacturing methods, revealed that South African producers are extremely inefficient in materials management. Both high levels of throughput time and cycle times suggest inefficient techniques of production. The local manufacturers are also well behind the Bally plant (in the UK)

[48] The IDC information should be treated with caution as Robert Feinblum told me that we only exported about one percent of production in 1991 (interview).

in adopting the new work organization techniques (responsible for higher levels of productivity), which encompass a move to cellular production (the rink system), multi-skilling of the workforce and Total Quality Control methods. Whilst the South African plants are aware of the need to move in the direction of World Class Manufacturing, they have made little progress. Job demarcation remains rigid. Whilst the Futura plant has begun to move to a rink based system of production it has yet to devolve responsibility to the workforce, encouraging them through the use of team based incentive systems to improve product quality.

Thus the above comparative study has underlined the need for local manufacturers to re-organize production within the firm and introduce new work organisation techniques. Several studies have revealed that it is these methods of production that have been the most significant cause for the rapid development of international competitiveness of the footwear sector in the East Asian NICs (Mody et al, 1991). Thus, South African firms would need too begin adopting these methods in their efforts to increase the quality of leather footwear, and reduce the cost of production.

However any attempt to introduce these methods without including the workforce is likely to be unsuccessful. International experience suggests that the most successful outcomes of plant reorganization are those that involve the workforce in the entire process and invest in training (see Ismail, 1992, 84).

3.2 Training

The high investment in the basic level of education of the workforce by the East Asian Countries (South Korea and Taiwan) has been a significant factor in their export success. By comparison South Africa's basic education levels are dismally poor (see Chapter Six). In addition international experience has shown that there is a high level correlation between higher levels of productivity and high levels of investment in vocational training (WDR, 1990/91). The poor and declining trends in labour productivity is clearly related to the low and declining levels of investment by footwear manufacturers in the vocational training of the workforce. Where training has occurred this is largely done "On the Job".

However the growing concern of the lack of training in the industry has led to the development of a Footwear Industry Training Board (FITB) representing both employer and employee bodies. The NPI Footwear Unit has been the primary mover behind the idea of the FITB. The NPI survey into the Industry Training needs has found that Production Management and Supervisory Training needs were most critical. Our interview confirms the findings of the NPI that production managers generally (with a few exceptions) appear to be most lacking in the skill and competence needed to re-organize production on the shopfloor.

The NPI appears to be a positive influence in the industry. It has argued that a training programme has to link in with a programme to restructure the industry. We will add that a restructuring programme has to be based on a coherent strategy for the Industry. The trade unions have argued that it was necessary to also prioritize the training of the workforce (operator level). The success of attempts to develop new work organisational practises on the shopfloor (team based and multi-skilling) will require a new attitude and co-operation of both the production management/supervisors and the workforce. Thus changes in work organization will have to be developed in tandem with increased training for both the production management / supervisors and the operators, for successful outcomes (that is, increases in productivity and quality).

The success of the FITB will depend on the willingness of management to cooperate with the FITB and make significant investments in their training needs. The attempt by the unions to claim a partnership of the FITB (50% representation) should be encouraged so as to begin joint responsibility and co-operation of both management and labour in the restructuring of the industry.

3.3 A filliere approach to the leather footwear industry

Footwear manufacturers interviewed blamed much of their production problems to the poor quality of tanned leather obtained from local tanners and the erratic and unreliable supply of leather. They also complained about the awesome power of the large local retailers for the squeeze on their profitability. Thus we have argued that any restructuring of the leather footwear industry must address the problems in the entire chain, pipeline, or network (filliere) of leather footwear production.

The pressure of a contracting and increasingly differentiated market in the UK in the early eighties caused Footwear Retailers to move to a Quick Response system to reduce inventories, and supply those products demanded by an increasingly differentiated market. These Retailers demanded high levels of flexibility by footwear manufacturers. Footwear manufacturers in turn (in response to this pressure) began to adopt the production techniques of a Just-in-time system (producing the right product in the right quantities at the right time) (Rubery, J, 1987).

The adoption of these production techniques require footwear manufacturers to develop strong and long term relationships with their backward (the tanners and component suppliers) and forward linkages (the retailers).

3.3.1 The backward linkages

If South African leather footwear producers are to produce good quality leather shoes for the global markets they will require a regular and flexible supply of good quality leather. Our analyses in the study above points out that the South African tanneries are unable to provide the local leather footwear manufacturers with good quality tanned leather. This has forced the leather footwear manufacturers to import up to 50% of their tanned leather notwithstanding the tariff rate of 15% ad valorem. The poor quality of the tanned leather is partly due to the fact that most of the tanneries are located far away from the footwear manufacturers. It has also been pointed out that the quality of local hides available to the tanneries is generally poor due to the lack of care of the Hides at the cattle breeding stage of the Hide Auction System. However, the major reason for the lack of sufficient quantities of good quality hides, is that the better quality hides are exported, before they are beneficiated into tanned leather. Over 50% of South African hides are exported either in the Raw Hides stage or in the Wet Blue stage (see Table 34). The reason for the exports lies in the fact that Raw hides fetch better prices in the international markets especially when the exchange rate is favourable.

The control of the hide market (through oligopoly pricing) by the same large companies that control the livestock market and the major tanneries has made any attempt to reduce the continuing export of raw materials difficult. The Hide Subsidy scheme has succeeded in increasing the beneficiation of Raw Hides up to the Wet Blue stage. However this has not decreased the total percentage of Hides that are being exported before being beneficiated to the tanned leather stage. We would argue that State policy should move decisively to drastically reduce the exports of raw hides by stopping the subsidy on Wet Blue exports and encouraging the beneficiation of local Hides up to the tanned leather stage, thus making available a larger supply of better quality locally tanned leather to the leather footwear manufacturers.

The trend of increasing exports of South Africa's raw hides is in sharp contrast to that of most developing countries. Table 36 above indicates that whilst most other countries were reducing their exports of Hides and Skins during the 1980's, South Africa was increasing its exports of Hides and Skins. This has been taking place while there has been very little exports of leather footwear. Thus South Africa's tendency, in the leather footwear industry (during the 1980s), has been in the direction of primary goods exports. Thus, whilst most developing countries, especially the NICs, were expanding their production of leather footwear South Africa

was moving backwards into the lowest value added stage of leather footwear production - that of the exports of its Raw Hides.

A policy to reduce the export of Raw hides and Skins will not succeed unless it is part of a total strategy (for the leather footwear filliere) to increase the demand of Raw Hides by local tanners (at competitive prices). Local tanners will increase their demand if there is an increased demand for good quality hides by local manufacturers. Thus the expanding exports of leather footwear will have a pull effect on its upstream suppliers. The market for tanned leather should be freed, reducing the tariffs on tanned leather thus allowing the local leather manufacturers to source tanned leather that is best suited for their export needs from local tanneries or internationally. Likewise, local tanneries should be encouraged to export their tanned leather thereby providing them with an incentive to develop their skills at producing for the international market. As the companies controlling the market for Hides and Skins also control the tanneries, allowing them to freely export their tanned leather will encourage them to further beneficiate the Raw Hides.

The control of the Hides and Skins market by an oligopoly creates fluctuating supply and volatile market prices. This market needs to be investigated with a view to promote greater competition and reduce the market price of Raw Hides. A change in the Auction system should also be investigated with a view to creating a more direct relationship between the buyers of Hides and the Cattle Breeders, thus enabling the buyers to encourage the Cattle farmers to produce better quality hides.

3.3.2 The forward linkages

About 50% of South Africa's footwear market is controlled by about 5 large retail companies. The large retailers have generally put increasing pressure on the manufacturers to reduce their prices thus squeezing their profitability. The impact of large retailers on manufacturers need not be a negative force as the pressure they apply on manufacturers will force them to develop more developed techniques of production to increase their efficiency and quality. However, the very high markups (of between 120-180%) of the Retailers needs to be addressed. Whilst they take the lion's share of value added (making large profits), and increase inflation (through increased prices), they reduce the domestic market for leather footwear putting it out of reach of the majority of consumers.

3.4 Trade policy

As we have discussed above, the history of this industry has been characterized by one of highest levels of protection since 1883. Import controls were lifted in 1987 only to be replaced by a 30% ad valorem interim duty. After concerted pressure by Footwear manufacturers this protection was increased in August 1991, to 60% ad valorem duties on textiles and synthetic footwear (plus 15% surcharge), to continue for 3 years, and then to be reduced to 35% over the next 5 years, until it reaches 30% by June 1999. These duties were extended to textile and synthetic uppers. There was to be a 30% ad valorem duty on leather shoes (plus a 15% surcharge). These duties were extended to leather uppers.

These very high tariffs have not stopped the increasing imports of lower valued footwear, mainly from China (interview). In our view these tariffs are already very high, and footwear manufacturers unable to compete with lower valued imports should be encouraged to restructure and move up the value added segments of the market, and begin to produce leather uppered shoes for the export market. Footwear manufacturers thus have about seven years to restructure - to increase plant level efficiency and to move up into higher valued leather production. Leather footwear producers do not appear to be affected by imports and the current duties of 30% ad valorem (plus 15% surcharge) should perhaps be scaled down (in terms of our GATT

requirements), when a restructuring programme to develop the exports of leather footwear is in place.

3.5 Institutions

The footwear industry is highly organized with almost 100% of its workforce organized into three trade unions. The employer bodies are organized into the FMF and the S.A. Tanners Association, the S.A. Hides and Skins Curer/Brokers Association, and the Footwear Components and Suppliers Association. In addition, there has been a long history of collective bargaining in the industry, organized through the Footwear Industrial Council. However the concerted effort to restructure the industry made by LIRI and Strat Plan 2000 has lost its initial momentum. In any event the major failure of this initiative was its inability to obtain the participation of the trade union movement. At the moment no force in the industry appears to be well placed to lead the restructuring of the Industry.

However, the impressive progress made by the formation of the FITB in bringing together both the employers and the trade unions is, perhaps, a good starting point to discuss the restructuring of the industry. The need to link a training policy to a broader industrial strategy could stimulate the process of restructuring the industry with the full partnership of the trade unions.

3.6 Industrial districts

Whilst the industry is highly geographically concentrated (70% in Natal), it is surprising to find that there is very little co-operation between firms (outside those that are part of the same company), even amongst those that belong to the same Company. The reasons for this are perhaps twofold and related. Most firms we interviewed manufactured a wide variety of products (in terms of style and type of shoes). They are attempting to obtain a share in every part of the domestic market, causing unnecessary competition and rivalry - if firms were producing for separate niches of the market there would be less rivalry. The second reason is that they are all producing for a small and contracting domestic market in which competition has become fierce.

It does appear that a move to targeting of particular market segments (both locally and internationally) amongst local producers will create a better basis for co-operation.

The need for cooperation between manufacturers and suppliers too will become more important, as they find that only by mutual co-operation can they increase their efficiency, and compete internationally.

Perhaps the lack of co-operation is due to the dominance of large enterprises in the industry (see discussion above). Large enterprises are more self sufficient and have less reason to co-operate. Perhaps the growth of small enterprises and an export oriented industry will create the basis for co-operation and competition, both horizontally amongst firms, and vertically between manufactures, retailers and suppliers (of components and leather). It is these factors that appear to be the main reasons for the successful development of dynamic Industrial Districts amongst South Africa's competitors, in Italy, Brazil, Taiwan and South Korea (see discussion in Ismail, 1992).

3.7 Small and Medium Sized Firms

International experience suggests that the dominance of large firms in the industry is not necessarily a disadvantage for export success (Levy, 1988). There is a prevalence of small and medium sized firms amongst most of those countries producing for the mid-to-upper ends of the global market. This suggests that small to

medium sized firms can be highly successful in the mid-to-upper ends of the global footwear markets.[49] In South Africa there is an added reason - that of social and racial equity.[50]

A re-structuring of the industry should develop appropriate institutions to assist and support the development of these enterprises. The need to stimulate the growth of small and medium sized firms should be part of the process of restructuring the industry. Thus the growth of the informal manufacturing sector can be seen as an opportunity to develop and expand the number of small enterprises.[51] These small enterprises should be encouraged to manufacture leather footwear for export.

Appropriate tri-partite (State, labour and Capital) institutions that operate at a regional and local level will have to be created to provide development assistance. Drawing upon international experience and expertize, especially from the Southern European countries, will be valuable. The development of "real services" to assist the small enterprises in Italy and other Southern European Countries should be researched with a view to emulating them in South Africa. "Real Services" are those services that support the productive sector in the form of the provision of services for training, design, technology research, and export marketing (Pyke et al, 1992). These services should be developed to assist in the restructuring of the industry, both for the export sector, and for the development of small enterprises. Local and regional governments should be encouraged by the trade unions and local manufacturers to subsidize such institutions. Existing private (eg, Strategic Planning) and public consultancies (The NPI Footwear Institute) and expertise should be encouraged to play a significant role in the development of these real services.

A development policy to encourage exports will require a co-operative effort by footwear tanning and component manufacturers, the major trade unions, and the Democratic State, to develop appropriate institutions for training, in design, new technology, new work organization techniques, etc. Particular attention should be paid to assist the small manufacturers, encouraging the development of their production competence and their exports. Attempts should be made to identify these small producers (who have emerged in large numbers in the late 1980s and 1990s (largely due to the recession), encouraging them to co-operate with each other, and share marketing and design resources. Attention to the development of small manufacturers will reduce the high levels of concentration in the industry, by both large firms, and concentration of ownership (by 4 companies). It will also increase competition in the domestic market, forcing the larger firms to become more efficient. Average firm size amongst successful exporters of higher value added footwear suggests, that smaller firms can be just as efficient as large firms (see Ismail, 1992)

3.8 The State

The different institutions of the State responsible for industry - the DTI, BTI and the IDC - have taken little interest in the footwear sector and currently do not even have a full time person to monitor developments in the industry (interviews). These institutions have thus far had an ad hoc policy based on simply acceding to manufacturers requests for even greater protection. The last BTI Report (No.2877)

---

[49] South Korea appears to have gained enormous export success through large firms in the footwear industry (see discussion in Ismail, 1992).

[50] South Africa has one of the highest concentrations of income and ownership in the world. The upper end of the income and ownership pyramid is almost totally "White".

[51] It was the crises in the footwear industry in Italy - strikes due to worker resistance that stimulated the development of small enterprises by the dismissed workers. These skilled workers began to produce high quality shoes for the domestic market and for export. The bulk of Italy's high quality fashion shoes for the upper end of the global footwear markets are produced in these small firms (interview, September, 1992, with the Director of CERCAL, a Footwear Centre that provided training to small footwear enterprises in Bologna, Emilia Romagna, Italy).

on the industry recognized the need to develop a Structural Adjustment Programme, but decided to grant the manufacturers high duties against rising imports instead.

Whilst this study has not discussed the role of the State in any detail, it has assumed (see Introduction) that the State could play a significant role in developing Industrial sectors through the use of trade policy instruments (tariffs and QRs), fiscal policy (tax incentives), and macro economic policies (credit policy and exchange rates). It is the selective use of these instruments that have contributed significantly to the export success of the East Asian NICs (Amsden, 1989; Wade, 1991). The export success of the Brazilian footwear industry too, has been attributed to the strategic use of these instruments (Korzeniewicz, 1990).

Finally, we return to the issue as to where our international comparative advantage lies (see Introduction to the study). Our analysis suggests that South Africa does not have a comparative advantage in lower valued (low waged) goods. To try and compete with China, in lower valued footwear, we would have to reduce wages in the footwear sector to one sixth of its current levels (that is, to less than R150 a month).

We thus conclude - like Levy (1992)did for the garment sector - that South Africa's international comparative advantage lies in the mid-to-upper end of the world footwear markets, and that expanding exports from this sector will increase employment and allow "moderate increases in real wages".[52] Industrial policy should strive to convert this comparative advantage into international competitiveness (that is, export success).

---

[52] The MD of Eddels (a large leather footwear company with some experience in exports) believed that with increased exports and productivity they could easily increase current wage levels (the average wage in Eddels was R1,050 a month).

Bibliography

Amsden, A. 1989. *Asia's Next Giant*. Oxford University Press.

Board of Trade and Industry (BTI), 1990. "Tariff Protection for the Industry Manufacturing Footwear. Report No. 2877".

BTI, 1991. "Increase in the Duty on Uppers for Footwear. Report No. 2944".

Chen, A. Wen-huei, 1991. "The relevance of the Taiwanese Footwear Industry Experience for South Africa". Dissertation submitted in partial fulfilment of the MBA degree, University of the Witwatersrand, Johannesburg.

Davidson, S. 1985. "The Impact of Imports on the South African Footwear Industry". S.L.T.C. Convention, 9-10 May 1985.

Davidson, S. 1991. "Overview of the Leather Industry. Prospects for Growth". Presented at SACTWU National Conference, Durban, 2 May 1991.

Evans, D. 1991. "Institutions, sequencing and Trade Policy Reform". Institute of Development Studies. Mimeo.

FAO. *World Statistical Compendium for Raw Hides and Skins, Leather and Leather Footwear 1968-1987*. United Nations, Rome

Footwear Manufacturers Federation of South Africa (FMF),1991a. "Footstats '90. Facts and Figures on the South African Footwear Manufacturing Industry. 1917-1990/91". Port Elizabeth, South Africa.

Footwear Manufacturer's Federation of South Africa (FMF), 1991b. "Annual Report 1990/91". Port Elizabeth, South Africa.

Hadjimichael, B. 1990. "Footwear: Global Subsector Study", in *World Bank Industry Series Paper No. 34*. The World Bank, Washington.

Hoffman, K. 1992. "Leather and Shoes: A strategy for Industrial Restructuring in the Dominican Republic". Report prepared for UNDP. IDS, University of Susses, Brighton.

ILO, 1992. "Employment and Working Conditions and Competetiveness in the Leather and Footwear Industry". *Fourth Tripartite Technical Meeting for the Leather and Footwear Industry*, Report II. ILO, Geneva.

Industrial Development Corporation of South Africa (IDC), 1991. "Sectoral Data Series. Manufacturing". Sandton, South Africa.

IDC, 1992a. "Industry Profile. Footwear".

IDC, 1992b. "Industry Profile. Tanneries and Leather Finishing".

Ismail, F. 1992. "Restructuring in the Global Leather and Shoe Filliere: Implications for a Post-Apartheid South Africa?" Dissertation submitted in partial fulfilment of the requirements of the Degree of Master of Philosophy (Development Studies). Institute of Development Studies (IDS), Sussex, Brighton, England.

Jordan, P. 1991. "Possibilities for a Resource-Based Industrialisation Strategy". Unpublished document.

Kaplinsky, R. 1991. Transformation No. 12.

Kaplinsky, R. 1992. "South African Industrial Performance and Structure in a Comparative Context". Paper prepared for first meeting of *South African Industrial Strategy Project*, Johannesburg, July 6-10, 1992.

Korzeniewicz, M.E. 1990. "The Social Foundations of International Competetiveness: Footwear Exports in Argentina and Brazil, 1970-1990". Duke University, United States of America.

Lal, D. 1993. *The Poverty of Development Economics*. Institute of Economic Affairs.

Levy, B. 1991. "Transaction Costs, the Size of Firms and Industrial Policy. Lessons from a Comparative Study of the Footwear Industry in Korea and Taiwan". *Journal of Development Economics*, No. 34.

Levy, B. 1992. "How can Manufacturing Efficiently Create Employment? A Preliminary Analysis of Trade and Industrial Policy". *Informal Discussion Papers on Aspects of the Economy of South Africa*. Paper No. 1. Southern Africa Department. World Bank, Washington.

LIRI, 1977. "Why does South Africa Export Hides and Skins". LIRI Symposium. Technical Bulletin, No. 41.

Little, I.M.D. 1979. "The Experience and Causes of Rapid Labour-Intensive Development in Korea, Taiwan, Hong Kong, and Singapore and the Possibilities of Emulation". *Asian Employment Programme Working Papers*.

Mody, A. et al. 1991. "International Competition in the Footwear Industry: Keeping Pace with Technological Change". *World Bank Industry and Energy Series* No. 51. The World Bank, Washington, D.C.

Moll, T. 1991a. "Micro-economic redistributive packages in LDCs" in Moll, P. et al. (eds), *Redistribution: How can it work in South Africa?* David Philip, Cape Town.

Moll, T. 1991b. "Growth through redistribution: A Dangerous Fantasy?" *South African Journal of Economics*. September 1991, Vol. 59. No. 3.

Muller, M. 1990. "Third World role models for a South Africa in Transition - some pointers from Brazil". *South Africa International*. Vol. 21. No. 2.

NPI, 1991. *Productivity Statistics*, 1992.

NPI, 1992. "RSA Footwear Manufacturing. Data Bank. Industry Report. 1991". July 1992. Durban.

Prochnik, V. 1992. "Spurious flexibility: Technical modernisation and social inequalities in the Brazilian Footwear Industry". *World Employment Programme* Working Paper No. 222. ILO, Geneva.

Pyke, F; Becattini, G; Sengenberger, W. (eds.) *Industrial Districts and Inter-Firm Co-operation in Italy*. International Institute for Labour Studies. ILO, Geneva.

Rubery, J., Tarling, R., and Wilkinson, F. 1987. "Flexibility, marketing and the organisation of production". *Labour and Society*, Vol. 12. No. 1.

Shoes and Views Directory. 1992/3. Published as Vol. 57. No. 1 of Shoes and Views magazine.

Sid Cohn, 1987. "STRATPLAN 2000. Final Report on Phase One of Stratplan 2000". Commissioned by LIRI Planning Committee and Board of Control.

UNIDO, 1992. Unpublished book on the Global Leather and Footwear Subsector. Vienna.

Van Wyk, G. 1988. "An Economic Analysis of the Footwear Industry". Department of Economic Research and Development. "Confidential". Industrial Development Corporation of South Africa. Sandton, Johannesburg.

Wade, R. 1990. *Governing the Market*. Princeton University Press.

World Development Report 1980, 1990 and 1991. World Bank, Washington D.C.

Trade Magazines

FMF Digest. Various issues.

Shoe and Leather News. Various issues.

Swailes, S.R. 1987. *World Footwear Markets*. 1987 Shoe and Allied Trades Research Association. Northants, England.

World Footwear. Various issues.

World Leather. Various issues.

Shoes and Views. Various issues.

The South African Shoemaker and Leather Review. Various issues.

Other References

SACTWU. Correspondence, various.

TURP. Analyses of Company Reports.

ANNEXURE A

List of Interviews

Large Factories

1. Eddels, Pietermaritzburg: Jonathan Hallows, MD; John Comley, Production Manager.
2. Futura, Pinetown: Gerald Borg, National Sales; Mr Cox, Production Manager.
3. Beiers Footwear, Pinetown: Doug Oats, GM.
4. Crown Footwear, Pinetown: John Ashworth, Production Manager.
5. Budget Footwear, Durban: Eric Grimaldi, Production Manager.
6. Jaguar Shoes, Pietermaritzburg: Chan Pillay, Production Manager.
7. Bally, Norwich, United Kingdom: Liam Donelly, Production Manager.
8. Clarks Shoes, United Kingdom: Ian Richy, P.R. Manager.

Subcontractors

9. Reddys Footwear, SBDC, Chatsworth: Mr H. Reddy.
10. Justerini Footwear, SBDC, Chatsworth: Mr J. Reddy.

Small / Micro-enterprise

11. TESSA Footwear, SBDC, Chatsworth.

Tanneries

12. Sutherlands Tannery, Pietermaritzburg.
13. Edendale Tannery, Pietermaritzburg.

Institutions

14. Footwear Manufacturers Federation (FMF): Arthur Wood, National Education Director.(telephonic interview).
15. Industrial Development Corporation (IDC): Mr Hein Wiese.
16. Board of Trade and Tariffs (BTT): Mr Libber. (telephonic interview)
17. Department of Trade and Industry (DTI): Mr Paul Theron (telephonic interview)
18. National Productivity Institute (NPI): Mr Peter Buglass, Footwear Unit.
19. Leather Industries Research Institute (LIRI): Gianni Giovanni, Training Director. (telephonic interview).
20. Footwear Industry Training Board (FITB): Mr Sam Davidson, Chairperson.
21. Trade Union Research Project (TURP): Diane Collins.
22. British Footwear Manufacturers Federation (BFMF), London: Mr Mike Herron, Industrial Relations Officer.
23. CERCAL, Cessena, Bologna, Emilia Romagna, Italy: Mr Casanova, Director.

24. International Labour Organization (ILO), Geneva: A. F. Pereira, Footwear Sector.

Companies

25. Conshu Group, Johannesburg: Robert Feinblum, MD.
26. Amshoe Group, Durban: Roy Ecksteen, Chairman.
27. Futura, Pinetown: Gerald Borg, National Sales.

Consultancies

28. Strategic Process Consultants, Johannesburg: Sid Cohn.
29. Andre Kapiela Enterprises, Durban: Guy Baxter.

Trade Unions

30. National Union of Leather Workers (NULW): Kessie Moodly, General Secretary; Danny Pillay, Durban Branch: Prem Govender, Pietermaritzburg Branch.
31. South African Clothing and Textile Workers Union (SACTWU).

Retailers

32. Markhams, Cape Town: Mr Fish, National Footwear Buyer.(FAX).
33. Truworths, Cape Town: Lara Thorn, National Footwear Buyer. (telephonic interview).
34. PEP Stores, Cape Town: Gordan Atkins, National Buyer.(telephonic interview)
35. Scotts Retail, Durban: Van der Linde, National Buyer.

TABLE 7

CLASSIFICATION OF FACTORIES
PER VOLUME OF OUTPUT

Year	Small Factories (-100 000 p/a)			Medium Factories (100 000 - 499 999 p/a)			Large Factories (+500 000 p/a)			Total Fac.
	No. of Fac.	Output	% of Tot. Output	No. of Fac.	Output	% of Tot. Output	No. of Fac.	Output	% of Tot. Output	
1953	33	1 380 000	8.77	38	8 390 000	53.33	7	5 961 000	37.89	78
1965	36	1 762 000	6.99	39	9 341 000	37.07	11	14 094 000	55.94	86
1977	29	1 331 000	3.83	43	11 946 000	34.35	20	21 498 000	61.82	92
1989	102	4 306 726	6.98	43	10 531 000	17.07	37	46 868 500	75.95	182
1990	122	4 321 225	7.96	43	11 331 000	20.88	31	38 624 300	71.16	196

Source: Adapted from FMF (1991a).

Table 16

South African Factories - Firm Level Comparison

	A (Beiers)	B (Crown)
Batch Size	400-20,000	any size
Lot Size	20	48
Throughput time	11 days	
Cycle Time	4 weeks	6 days
Number of operations		
Job demarcation	Rigid	
Distance travelled		
Space required		
Output/day	7000	8000
Number of Workers	222	
Output/worker	315	
shoe type	Syn./PVC/PU	Synt. lines 2 leather lines
shoe construction*	inject. moulded	injected/stuck on
ex-factory price	various	various
window price	R19,99 - R39,99	

* Type of Construction

Welted (W)	Sliplasted
Stitched Down (SD)	Injection Moulded
Stuck On (SO)	Miscellaneous

Table 17

South African Factories - Firm level comparison

	A (Beiers)	B (Crown)
Stocks:		
Raw Material	R1,5m	None
WIP	R600,000	Minimal
finished goods	R460,000	6 days WIP
Stock turns p.a.		
reject rate	1,9%	0,9
returns	0,1%	0,8
rework	insignificant	1,8
Training/Rs spent p.a.	R2000	none
incentive scheme	none	none
Technology:		
CAD		
old/modern/hi-tech	old	modern
Averag. Age of machines	25 years	
Organization:		
Layout	traditional	traditional track system
Quality-dept/TQC	seprate dept.	quality dept.
relationship with suppliers	Poor	unstable
Subcontracting of closing dept.	4000 p/d	casual labour

Table 19

Major Exporters of Footwear

	Growth Rate % 1978-87	Share in World Market % 1978	1987
Italy	2.7	35.4	26.6
Taiwan	12.3	11.0	18.4
South Korea	10.7	9.2	13.6
Brazil	13.4	3.2	5.9
Spain	2.1	7.6	5.4
Portugal	26.2	0.8	3.8
France	0.9	5.6	3.6
China	20.9	0.9	2.9
West Germany	3.8	3.4	2.8
Austria	1.8	2.4	1.7
Yuguslavia	6.7	1.3	1.4
United Kingdom	-0.1	2.1	1.2
Hong Kong	5.4	1.3	1.2
United States	10.8	0.7	1.0
Nettherlands	3.5	1.1	0.9
Swizerand	2.5	1.1	0.8
Thailand	52.9	0.0	0.7

Source: Hadjimichael, 1991.

TABLE 26

THE WORLD'S LARGEST EXPORTERS OF LEATHER FOOTWEAR 1970 AND 1990

Country	Yearly growth rate (percent) 1970 - 1990	Exports (million pairs) 1990	Share of World exports 1970	1990	Cumulated shares (percent) 1990
Italy	1.8	245.2	43.2	19.9	19.9
South Korea	17.5	193.2	1.9	15.7	35.6
Brazil	24.1	152.3	0.5	12.3	47.9
Taiwan	18.5	108.1	0.9	8.8	56.7
Spain	3.9	77.7	9	6.3	63
Portugal	16.4	69.4	0.8	5.6	68.6
China	18.1	41.8	0.4	3.4	72
Hong Kong	19	39.3	0.3	3.2	75.2
Yugoslavia	6.4	33	2.4	2.7	77.9
Czechoslavia	0.7	32.2	7.1	2.6	80.5
Germany Fed. Rep.	4.7	31.1	3.1	2.5	83
Thailand		23	0	1.9	84.9
France	-1.2	20.2	6.4	1.6	86.5
Romania	2.5	20.1	3.1	1.6	88.1
Poland	1.5	18.7	3.5	1.5	89.6
Hungary	0.5	14	3.2	1.1	90.7
United Kingdom	0.1	12.2	3	1	91.7
India	3	12	1.7	1	92.7
Netherlands	5.2	11	1	0.9	93.6
Austria	2.9	9.9	1.4	0.8	94.4
United States	9.1	8	0.4	0.6	95
Indonesia		7.6	0	0.6	95.6
Morocco	16.6	4.9	0.1	0.4	96
Denmark	5	4.8	0.5	0.4	95.4
Mexico	10.1	4.6	0.2	0.4	96.8
Cyprus	114	4	0.1	0.3	97.1
Switzerland	1.8	3.3	0.6	0.3	97.4
Tunisia	19	3.2	0	0.3	97.7
Belgium	0.6	2.9	0.6	0.2	97.9
Greece	4.5	2.4	0.2	0.2	98.1

Source: UNIDO (1990)

TABLE 27

PRODUCTION OF LEATHER FOOTWEAR, 1970 - 1990.
SELECTED COUNTRIES AND REGIONS.

Region or Country	Production (million pairs) 1970	1990	Growth rate (in %) 1970 - 1990
World	3 047.7	4 268.8	1.7
Industrialized countries	2 273.6	2 247.2	-0.1
High-wage countries	837.8	439.4	-3.2
Austria	13.8	15.8	0.7
Belgium	10.3	2.4	-7
Canada	27.7	15.1	-3
Denmark	5.7	4.5	-1.1
France	86	76.9	-0.6
Germany Fed. Rep. of	116.5	53.6	-3.8
Netherlands	16.7	5.4	-5.5
Switzerland	10.4	4.3	-4.3
United Kingdom	99.6	56.2	-2.8
United States	442	201	-3.9
Low-wage countries	550.3	793.2	1.8
Finland	7.2	6.6	-0.4
Greece	15	13.8	-0.4
Ireland	7	2.6	-4.9
Israel	4.8	6.6	1.6
Italy	264.7	320	1
Japan	54.1	54.3	0
New Zealand	5.2	4	-1.3
Portugal	17.6	96.4	8.9
South Africa	29.9	21.8	-1.6
Spain	74.6	158.5	3.8
Eastern Europe	916.6	1 106.2	0.9
Czechoslovakia	56.6	55.7	-0.1
Hungary	36	31.1	-0.8
Poland	62.2	71.5	0.7
Romania	40.4	68.4	2.7
USSR	676	819	1

TABLE 27 (Cont.)

Region or Country	Production (million pairs) 1970	1990	Growth rate (in %) 1970 - 1990
Developing Countries	774.1	2 021.6	4.9
Latin America	223.7	490.7	4
Argentina	34.5	39.5	0.7
Brazil	27.1	257.6	11.9
Mexico	76.1	50.6	-2
Africa	61.7	131.4	3.8
Algeria	5.4	8.2	2.1
Egypt	16.8	57.3	6.3
Morocco	10	19	3.3
Nigeria	5.4	8.5	2.3
Sudan	7	9.1	1.3
West Asia	38.8	77.3	3.5
Cyprus	1.9	7.4	7
Iraq	8	4.6	-2.7
Turkey	26	61.6	4.4
South East Asia	418.8	1 230.6	5.5
Afganistan	9.7	11	0.6
China	101.6	4406	7.2
Hong Kong	0.7	6.8	12
India	205.5	325	2.3
Indonesia	7	14.5	3.7
Iran	16	36.3	4.2
South Korea	10.7	214	16.1
Pakistan	35	47.7	1.6
Philipines	1.7	7.2	7.5
Thailand	5.4	34.5	9.7
Taiwan		100	

Notes : Figure for Taiwan is for 1989.

Source : UNIDO (1992) and World Footwear (Oct. 1990).

TABLE 31

CONSUMPTION OF LEATHER FOOTWEAR IN SELECTED COUNTRIES AND REGIONS
1970 TO 1990

Region or Country	Consumption			Per capita consumption		
	1970	1990	Growth rate 1970–1990	1970	1990	Growth rate 1970–19
	(million pairs)		(in %)	(in pairs)		(in %)
World	3 007.2	4 333.6	1.8	0.8	0.8	0.
Industrialized Countries	2 256.4	2 875.8	1.2	2.1	2.4	0.
Switzerland	16	22.8	1.8	2.6	3.5	1.
Germany Fed. Rep.	155.3	200.5	1.3	2.6	3.3	1.
Denmark	9.2	13.2	1.8	1.9	2.6	1.
France	72.1	137	3.3	1.4	2.4	2.
United States	561	726	1.3	2.7	2.9	0.
Finland	6.9	12.5	3	1.5	2.5	2.
Belgium	18.9	26.6	1.7	2	2.7	1.
Canada	37.5	26.4	−1.7	1.8	1	−2.
Netherlands	25.6	31.4	1	2	2.1	0.
Japan	51.8	70.5	1.6	0.5	0.6	0.
United Kingdom	103.2	143.2	1.7	1.8	2.5	1.
Austria	11.2	26.9	4.5	1.5	3.5	4.
Italy	93.3	94.1	0	1.7	1.6	−0.
New Zealand	5.6	4.3	−1.3	2	1.3	−2.
Spain	38.7	86.2	4.1	1.1	2.2	3.
Israel	5	7.6	2.1	1.7	1.7	−0.
Ireland	5.9	16.4	5.3	2	4.4	4.
Greece	14	15	0.3	1.6	1.5	0.
Portugal	14.5	28.8	3.5	1.6	2.8	2.
South Africa	31	22.6	−1.6	1.4	0.6	−3.
Eastern Europe	915.8	1 112.6	1	2.6	2.8	0.
USSR	735.7	900.6	1	3	3.1	0.
Czechoslovakia	28.2	23.5	−0.9	2	1.5	−1.
Hungary	24.9	21.2	−0.8	2.4	2	−0.
Romania	28.3	49.4	2.8	1.4	2.1	2.
Poland	51.4	53.5	0.2	1.6	1.4	0.

TABLE 31 (Cont.)

Region or Country	Consumption			Per capita consumption		
	1970 (million pairs)	1990	Growth rate 1970–199 (in %)	1970 (in pairs)	1990	Growth rate 1970–1990 (in %)
Developing Countries	750.8	1 457.8	3.4	0.3	0.4	1.2
Latin America	220.8	334.7	2.1	0.8	0.8	–0.2
Argentina	34.4	39.2	0.6	1.4	1.2	–0.9
Mexico	75.4	46	–2.4	1.4	0.5	–4.9
Brazil	25.1	105.3	7.4	0.3	0.7	5
Africa	66.1	132	3.5	0.2	0.2	0.5
Algeria	5.4	8.3	2.1	0.4	0.3	–0.9
Morocco	9.8	14.1	1.8	0.6	0.6	–0.7
Egypt	16.8	57	6.3	0.5	1.1	3.9
Nigeria	6	8.6	1.8	0.1	0.1	–1.5
Sudan	7	9.1	1.3	0.5	0.4	–1.7
West Asia	38.5	73.2	3.3	0.6	0.7	0.4
Cyprus	1.7	3.4	3.6	2.7	4.8	2.9
Turkey	26	61.6	4.4	0.7	1.1	2
Iraq	8	4.6	–2.7	0.9	0.2	–6.1
South East Asia	399.9	858.4	3.9	0.2	0.3	1.9
Singapore	1.3	5.5	7.6	0.6	2	6.2
South Korea	3.1	22.6	10.4	0.1	0.5	8.8
Iran	16	36.3	4.2	0.6	0.7	0.8
Thailand	5.4	11.5	3.8	0.2	0.2	1.6
Indonesia	7	7	0	0.1	0	–2.1
Philipines	1.7	6.1	6.7	0	0.1	4.4
China	100.1	364.2	6.7	0.1	0.3	5
Pakistan	35	46.5	1.4	0.5	0.4	–1.7
India	198.8	313	2.3	0.4	0.4	0.1
Afganistan	9.7	11	0.6	0.7	0.7	–0.3

Source: UNIDO (1992).

TABLE 32

WCM BENEFITS

	1990	1992	End 1993 Target
1. SPACE	6546m²	4885m²	4885m²
2. STOCKS			
a. RAW MATERIALS	£1.36m	£0.65m	£0.5m
b. WORK IN PROGRESS	£0.49m	£0.18m	£0.1m
3. QUALITY Rejects	2.42%	1.71% NOW	0.90%
Returns	2.15%	1.36% NOW	0.90%
*4. LABOUR EFFICIENCY	BASE	-15%	-25%
5. LABOUR FLEXIBILITY	I M P R O V I N G R A P I D L Y (X 3 ?)		
6. LEADTIME	20 days	4 days Lowestoft/Norwich (30%) ---> (30%) 6 hrs Cut to Box (20%) ----------> (70%)	

* Labour costs already lower than Italy on your figures!

Table 33

British Factory, South African Factories - Firm level comparison

	Bally	Bally mini-plant	Futura mini-plant	Eddels plant 2
Batch Size		144	>40	>12
Lot Size		12	10	20
Throughput time		6hrs	7 days	14 days
Cycle Time	4 days	6 hours	8 weeks	4 weeks
Number of operations				
Job demarcation	Multiskilling		Multiskilling	demarcation
Distance travelled				
Space required				
Output/day	2100	200	1600	3500
Number of Workers	350	18	140	585
Output/worker	6	11.1	11.4	6
shoe type	50% synt.	80% leather lined/ladies	100% leather ladies/mens	100% leather Mens
shoe construction*			SO/IM/SD	
ex-factory price			R25-50	R80
window price	£50-£65/70	R250 - R300	R120-R160	R150-R200

* Type of Construction

Welted (W)	Sliplasted (S)
Stitched Down (SD)	Injection Moulded (IM)
Stuck On (SO)	Miscellaneous (M)

Table 34

British Factory, South African Factories - Firm level comparison

	Bally	Bally mini-plant	Futura mini-plant	Eddels plant 2
Stocks:				
Raw Material	£0.65m		N/A	R4.5m
WIP	£0.18m	none	R260 000	R2.2
finished goods			R520 000	R1,0m
Stock turns p.a.				
reject rate	1.71%		1.8%	0.5%
returns	1.36%			0,7
rework			0.1%	
Training/Rs spent p.a.				R85,000
incentive scheme	team based	team based	nil	team based
Technology:				
CAD	CAD		CAD	CAD
old/modern/hi-tech		modern	modern	old
Averag. Age of machines			4 years	15 years
Organization:				
Layout	5 mini-factories rink system		5 mini-plants	traditional track system
Quality-dept/TQC	TQC		Quality dept.	Quality dept
relationship with suppliers	partnership		fair	unstable
Subcontracting of closing dept.			900prs	

Table 35

British Factory. South African Factories - Firm level comparison

	Bally	Bally mini-plant	Futura mini-plant	Eddels plant 2
Product variety:				
styles produced	60-70		20 p/day	350
colours	6-7 colours		10 to 15	10
no. of seasons	2 seasons in 4 colours		2 seasons	2 seasons
Breakdown of factory costs (%):				
Overheads	30		29	40
Raw materials	40		53	43
Labour costs	30		18	17
Wages (p.w): Upper	£275 (R1292)		R385	R350
Lower	£120 (R570)		R234	R200

TABLE 37

WORLD PRODUCTION OF LEATHER, 1975 - 1990
(PERCENTAGES)

	Heavy bovine leather			Light bovine leather			Light leather from sheep & goats		
	share in world		growth rate	share in world		growth rate	share in world		growth rate
	1975	1990	1975 - 1990	1975	1990	1975 - 1990	1975	1990	1975 - 1990
Industrialized countries	68.3	55.8	-2.39	58	49.7	0.58	61.5	48.3	-0.1
of which:									
USSR	29.1	23.6	-1.98	9.7	7.4	0.09	14.5	8.5	-1.64
US	9.2	5	-6.39	8.3	6.8	0.08	2	1.2	-2.93
Italy	8.8	8.4	-1.83	7.6	11.3	3.54	14.7	11.3	-0.41
Spain	5.3	3.1	-4.09	2.8	2.9	2.03	7.4	11.1	5.84
Developing countries	31.7	44.2	1.04	42	50.3	2.91	38.5	51.7	3.62
of which:									
China	2.1	9	10.44	1.4	5.1	11.3	3.3	9	9.52
India	7.4	10.4	1.44	9.1	7.6	0.77	13	11.3	0.55
South Korea	1.5	3.3	2.67	1.9	7.5	11.39	0.1	1	26.13
World	100	100	-1.1	100	100	1.63	100	100	1.56

Source: UNIDO (1992).

TABLE 38

Production and Export of Hides, Leather (heavy and light) and Leather Footwear.
South Africas' Performance compared with Selected Countries
Selected Years

	1966-1971							1980							1987						
	A	B	C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E	F	G
Argentina	12.3	42.9	13.1	207	188.3	35.6	0.1	13.8	36.6	14.9	364.8	254.8	37	0.1	13	2.4	17	417.6	260	40	0.3
Brazil	9.3	7.9	12.8	226	21.1	52.3	3	9.8	0	25.3	360	60	161.7	43.3	10	1.8	21.6	400	140	250	145
South Korea	0.2	0	0.8	22.8	0	9.3	6.2	0.5	0	13.9	147.2	6.3	32	10.3	1	0.1	16	627.4	185	190	179.9
South Africa	2.1	9.2	2.6	36.7	1	30.1	0.1	3	36.6	1.2	43.9	7	30.4	0.2	2.8	45	2.8	50.9	2.6	26.1	0.2

A - Production of Hides and Skins in millions of pieces.
B - Exports of Hides and Skins in millions of $US.
C - Production of Heavy Leather from Bovine Animals in thousands of tons.
D - Production of Light Leather from Bovine Animals in millions of square feet.
E - Exports of Light Leather from Bovine Animals in millions of square feet.
F - Production of Leather Shoes in millions of pairs.
G - Export of Leather Shoes - All types - in millions of pairs.

Source: Calculated from FAO (1969).