# **Restructuring Manufacturing in South Africa's Lagging Regions: The Case of the Free State**

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## ABSTRACT

The manufacturing economy of the Free State reflects both historical dependence on locally available raw materials and high-levels of state intervention, in terms of support for import substitution and Homeland development. In the contemporary era, deindustrialization, the uncertain future of the clothing/textile industries and limited growth over the last ten years, suggests that, in terms of manufacturing, the Free State is a 'lagging' region. While there has been significant expansion in the number of small firms, this is not matched by employment growth and does not compensate for the loss of many large firms and economic downscaling in the Goldfields. Key sectors such as petro-chemicals and gold jewellery present certain opportunities for future growth.

### Introduction

Manufacturing industry has, traditionally, been one of the key drivers in most national economies, and given what for many firms are the need to have either close links with raw material or markets, the spatial and regional implications of the presence or absence of manufacturing can often be profound. In the case of South Africa with its historical dependence on the extraction and processing of raw materials - agricultural and mineral, the location of raw materials exercised a key influence on the emerging industrial economy of the country from the nineteenth century, creating what Fine and Rustomjee (1996) have identified as the 'Mineral-Energy-Complex' (MEC). The MEC refers to a core set of industries, mainly located in the central regions of the country, which focus on the processing of raw materials, energy generation and meeting the diverse industrial needs of extractive industries. The picture with manufacturing is never a static one however and changes in global demand, labour supply, availability of raw material, markets and increased competition exercise a profound and continual changing influence on the operation and location of manufacturing activity (Storper and Walker, 1989), creating distinctive regions of 'recession' and 'resurgence' in a space economy as the operation and location of firms alters (Chisholm, 1990). In the case of the Free State Province in South Africa, given its centrality and the traditional reliance of the national economy on some of its key products (maize, coal and gold) the emergence of a core set of processing industries from the 19th century became fundamental to the operation of the national and provincial economies. The picture has not however been a static one and certain key changes can be discerned. The most obvious are the enhanced importance of the petro-chemical cluster centred on Sasolburg over recent decades, the absolute decline in the mining and industrial capacity of the Goldfields, a relative shift upwards in the importance of small and medium firms compared with the larger firms, significant albeit potentially short-term growth in the clothing and textile sector, and mixed fortunes experienced by the traditionally important agroindustries and former Homeland industrial centres. Some of these changes have occurred as a result of a complex array of factors, the most important including the attraction of export orientated industries to the coastal cities, centralisation of many domestically focussed manufacturing operations in Gauteng which Sasolburg is closely linked with, importation of cheap foreign products, particularly clothing and exhaustion of many

of the gold mines. As a net result, as is discussed below, the Free State can be regarded as a 'lagging' region in terms of manufacturing and one which has experienced restructuring in recent years, which has altered the relative importance of the various sectors and their spatial concentration, over and above relative shifts in the proportion of large versus small firms.

This paper sets out to detail recent trends in the manufacturing economy of the Free State and to discuss possible implications for the future. After providing a theoretical context, the focus of this study shifts to a brief historical overview of manufacturing in the Free State, before moving on to a consideration of general manufacturing trends in the country and the role and place of the Free State in the national economy. Thereafter details regarding the nature, location and sectoral foci of Free State firms are provided and there is a discussion based on interviews with a selection of provincial manufacturers regarding critical issues impacting on operations and their perceptions of future manufacturing prospects in the province. The paper concludes with a discussion of future plans and considerations for this key sector. Research for the study was based on documentary analysis of available information on the province, statistical data sourced from the Bureau of Market Research (BMR), interviews with manufacturers and a study of manufacturing in the Province undertaken by the authors for the Premier's Economic Advisory Council in 2004. The latter included detailed interviews undertaken with a cross-section of large and small manufacturing firms undertaken in 2003 and 2004. The single most important data-source was the aforementioned BMR. The BMR in based at the University of South Africa where it maintains an Industrial Register of firms operating across the country. The register contains detailed information on key issues such as labour force size, location and industrial sub-sector. Information for 1994 and 2003 was drawn on to provide a longitudinal perspective of recent trends in the provincial manufacturing economy which facilitates an understanding of changes taking place in the Province.

### **Relevant current international debate**

As one of the more dynamic sectors in any economy, manufacturing is vulnerable to broader shifts in the global and national economies, and as such, an understanding of current trends and prospects in the Free State manufacturing economy needs to be grounded within the context of shifts in manufacturing globally and nationally. At a global level, manufacturing has shifted fundamentally in its spatial and operational profile, away from the relative rigidity of the pre-1970s Fordist mode operation to the more fluid scenario of flexible accumulation and the New International Division of Labour, which has had a significant impact on the location of firms, corporate control, cross-border operation and economic linkages (Knox, Agnew and McCarthy, 2004). Within this context Dickin (2003) argues that we are seeing the rise of a 'new global economy' in which inter-linkage, flow and dynamism are hallmarks. Failure to integrate within this new system can lead to marginalization. Within this context, places and regions more specifically have acquired new, albeit vulnerable significance as 'the versatile hyperspace of flexible accumulation redefines the place of the locality' (Swyngedouw, 1989, p. 31), promoting the identification of the key role 'regions' place in the global economy and the emergence of discourse on the 'New Regionalism' (Lovering, 1999). Future manufacturing success in an area such as the Free State, would appear to be associated with an ability to interface more fully with the global economy while building on embedded local strengths.

New corporate geographies and the globalisation of production make all places and regions vulnerable to competition and impermanence. On top of this, growth and accumulation develop unevenly across a national economy and as such unevenness influences national growth, trade and competitiveness (Martin and Sunley, 1998). As a net result, the spatial pattern of economic success forms a regional mosaic with some places better able to succeed at certain times than others. Patterns of uneven regional development are inevitable, and at present 'the new industrialisation has favoured existing metropolitan areas and coastal regions. Attempts at decentralisation to growth poles have not met with much success' (Knox, Agnew and McCarthy, 2004, p. 347). Regions possessing the necessary endowments are able to compete successfully within the global economy, conversely other regions lacking the required resources and/or access to appropriate production and marketing networks tend to fall behind. Such regions can be considered as 'lagging regions' as opposed to 'leading regions' (Ilbery et al., 2004, Watts, et al., 2005). These considerations are particularly pertinent to the Free State which lacks key assets to facilitate closer global integration and, in many respects, could be regarded as a 'lagging region'.

Successful industrial regions have been associated with a series of hallmarks, including, the presence of defined manufacturing clusters, institutional thickness, the presence of stronger networks between firms and the broader economy and society (Lipietiz, 1993). According to Cabus (2001, p. 1018) 'successful regions are precisely those in which there is a mature network culture with networks between firms and public or semi-public agencies responsible for economic development'.

A new geography of manufacturing does appear to be emerging in which successful regions are targeted for investment and expansion in by corporates which increasingly rely on the existence of 'networked territories' in which socio-cultural, institutional and networking considerations / territorial complexes are critical to sustained growth (Lipietiz, 1993). In response governments have tried to promote industrial regions / clusters as point of investment (Cox, 2004). Success is however not guaranteed and inherent weakness and shifts in the global, regional and local economies can imperil a region's future. In addition, according to Bradley and Taylor (1996 in Martin and Sunley, 1998, p. 212), 'localities with poor socio-economic infrastructure and poor economic performance also tend to be marked by poor educational performance'. The key link between human capital and local economic performance is clearly critical, particularly in an increasingly knowledge based economy.

In the case of South Africa, while there are attempts to promote a more knowledge based economy and to participate more fully in the global economy, as is starting to happen in Gauteng (Nel, 2002), the overall picture is one of some uncertainty. Overcoming the legacy of an inward looking, import substituting economy which persisted till the 1990s, has created an industrial structure vulnerable to competition and ill-adapted to global standards in terms of issues of quality and productivity. While key sectors and their associated regional clusters, such as motor vehicle manufacturing and chemicals are growing, other sectors - such as clothing, textiles and some mineral processing enterprises are in absolute decline and worrying levels of job loss took place in the 1980s and 1990s (Nel, 2002). Bell and Madula (2002) have identified fundamental weaknesses of the national manufacturing economy including poor overall performance for the last few decades, export constraints, low rates of investment and value-adding, the effects of significant mine closures and low skills levels. As a result, they argue that 'the challenge facing South Africa is that of climbing the international ladder of industrial production to more high-tech, more skills-intensive, and higher valueadded manufacturing activities. This is all the more difficult for a natural-resource abundant economy such as South Africa's' (Bell and Madula, 127). Historically however, as noted above, the national economy was highly dependent on the emergence and strength of the MEC (Fine and Rustomjee, 1996), this is now being weakened by mine closure, and the shift to a service and knowledge based economy which has serious ramifications for a province such as the Free State which traditionally depended on MEC type operations.

In addition to limited growth, Kleynhans et al. (2003) note that there is growing spatial inequality in South Africa. Previous forms of state intervention in the space economy to correct spatial imbalances however yielded few benefits (Tomlinson and Addelson, 1987). While the state is clearly supporting the development of key manufacturing clusters, with the petrochemical cluster being the most pertinent to the Free State, current regional support is limited and does not appear to have yielded significant benefits beyond the growth experienced in the main metropoles. In terms of the future for the country and the Free State, the basic reality, as argued by Cassim (1988, p.14), is that 'any new government will not be at liberty to fabricate an economy. It will in fact inherit an economy which imposes a certain logic and rigidity on the course of future development'. In addition, the international division of labour imposes its own constraints on the ability of the country to adequately participate in the global system, particularly in the light of the poor competitiveness of many firms (Editors Inc., 2000).

It is within the context of both change and vulnerability that the Free State manufacturing economy needs to be evaluated.

### Historical trends in the Free State manufacturing economy

Manufacturing emerged in the Free State from the late 19th century in response to the need to process agricultural products and to meet the demands of the growing urban centers. In the 20<sup>th</sup> century the growth of mining, primarily coal and then gold, led to diversification and growth of the manufacturing and service sectors in those towns. In addition, development in the 20th century came to be influenced by the dominance of the Keynesian state that sought, from the 1920s, to encourage a policy of Import Substitution in the country (Nel et al., 2004). The key outcome in this regard was the decision in the mid-1950s to establish SASOL in Sasolburg which significantly changed the industrial landscape in the Northern Free State. The history of the manufacturing industry in the Free State in the 20<sup>th</sup> century, however, cannot be detached from apartheid planning and homeland development. Although industries have developed elsewhere, the provincial manufacturing landscape still portrays the results of industrial development in former homeland areas, namely Qwaqwa, Botshabelo and part of Bophuthatswana (Thaba Nchu) (Nel et al., 2004).

Support for industries established on the 'borders' of Homelands commenced in the 1960s. From 1968 incentives were granted to firms setting up within growth points in the Homelands and in 1981, in terms of the Regional Industrial Development Programme, support was massively expanded. In the Free State three areas were declared industrial development points, namely in Qwaqwa (including Tshiami), Botshabelo and Thaba Nchu. In Botshabelo 57 factories, employing 10 000 people, were in operation by 1990. In Qwaqwa approximately 360 factories (180 big and 180 small) were developed, employing approximately 30 000 people by 1990. No specific figures are available for Thaba Nchu. Krige (1991, p. 113) summarises the industrial development in Botshabelo in the following words: 'As one of the many designated growth points Botshabelo receives state incentives in an attempt to attract local and international investment in the area. The level of these incentives is such that Botshabelo and other growth points can claim to be amongst the cheapest places from which companies can produce. Its financial cost to the state is indeed high, but it is the exploited workers of Botshabelo who bear the real burdens'. Bloemfontein was proclaimed an industrial de-concentration point in 1988 and for this purpose, Bloemdustria was established, 20 km east of Bloemfontein. Krige (1991) records that by 1990, eight factories were operating in Bloemdustria. Since 1990 this figure has not increased. In fact, there is now evidence of empty buildings and buildings being used for warehousing purposes.

Huge costs, the deliberate enforcement of apartheid policies and questions regarding the permanence of firms in the growth points were highly contentious issues (Tomlinson and Addleson, 1987). Despite this criticism, it should also be mentioned that these policies of industrialisation did ensure some form of income and also assisted people in making a living in the homeland areas. However, with the demise of apartheid in the early 1990s, the existing subsidies were discontinued, bringing new challenges for the former homeland areas, as discussed by Pickles (1991) with de-industrialisation clearly impacting of the livelihoods of Homelands residents (Slater, 2001). In the case of Botshabelo some 3000 manufacturing jobs had been lost by 1997 (Tomlinson and Krige, 1997). Despite the effective closure of Bloemdustria, in the other points there has been both industrial closure and the frequent reuse of plants – which are now available at very low rentals for warehousing, small scale manufacturing and interestingly enough, for South African and Chinese firms to establish clothing firms.

### National trends in manufacturing

South Africa has a well-established manufacturing base, which places it well ahead of many developing countries. However, years of isolation, a heavy dependence on primary products and competition globally have been barriers to further growth, despite changing global circumstances. Exceptions to these are sub-sectors which have achieved competitiveness and an enhanced market share. In the South African context Bell and Madula (2002) conclude that given current trends in the various sectors which make up South Africa's economy, manufacturing has a vital role to play in terms of employment and economic growth for both economic and political reasons. However shortage of skills, technology and market access are barriers to further growth. Since 1971 manufacturing's contribution to economy has remained relatively constant at between 27,1 and 29,5% of GDP. Manufacturing has however increased in importance in terms of exports, now constituting 53,3% of total exports, partially as a result of the declining role played by mineral exports (TIPS, 2003). The share of national manufacturing output which is now exported has risen from 13% to 21%, indicating that the economy is gradually becoming more export orientated.

Despite these broadly positive trends, issues of concern are discernable in the national manufacturing economy. These include the closure of industries related to the mining industry which is generally in a state of decline, particularly in the Free State, Gauteng and KwaZulu-Natal areas, weakening of the agro-industrial base following changes in the agricultural sector, closure of industries which are no longer competitive globally in face of cheap imports, with textiles and clothing being the most vulnerable and the frequent closure of once state supported firms in or the near the former Homelands. Positive trends are expansion of manufacturing in core clusters which are globally competitive, e.g. chemical and vehicles manufacturing, and the encouragement of sub-contracting relationships between large and small firms to the benefit of emerging enterprises. In terms of improved value-adding, the best performing sub-sectors since 1997 have been plastics, communication and leather goods. Some of the worst performing are those which are important in the Free State, namely, food processing, clothing and textiles (TIPS, 2002).

#### The Free State's manufacturing economy

Within the national context the overall economic and more specifically the manufacturing importance of the Free State appears to be rather minor. The Free State as a whole contributed R33,5 billion in 2001 to the national economy which represents a modest 5,8% of the national GDP. In terms of the manufacturing industry specifically, the last Census of Manufacturing (StatsSA, 1998) established that 3,8% of the nation's manufacturing establishments and 3,7% of its output is generated in the Free State. In their statistically overview of the Province, Urban-econ (2000) established that in 1993, 851 establishments were in operation, employing some 46 500 people and generating a gross output of R 8 170 million. [In 1990 manufacturing contributed some 18% of the provincial GGP, but in 2002 it had fallen to 16%. However in terms of ranking, because of the absolute decline in mining, its relative

position actually rose from  $3^{rd}$  to  $2^{nd}$  most important after community services.] In terms of employment it has remained static as only the  $6^{th}$  biggest contributor of jobs (See Figures 1 and 2) (Urban-econ, 2003).

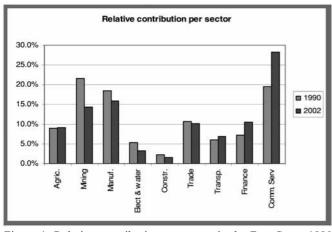


Figure 1: Relative contribution per sector in the Free State, 1990 and 2002 Source: Urban-econ, 2003

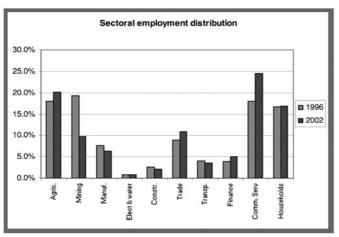


Figure 2: Sectoral employment contribution in the Free State, 1996 and 2002

Source: Urban-econ, 2003

In terms of overall growth trends over the last third of a century, certain comments can be made. Although considerable growth in manufacturing took place between 1970 and 1980, it declined between 1980 and 1990. A negative growth rate is also reported for the period 1996-2002 (see Table 1). This also meant a negative growth in employment. A study by Urbanecon (2003) indicated that, between 1996 and 2002, the percentage of employment opportunities in manufacturing dropped from 7.5% of the total employment figures in the province to 6.5% of the total (Urban-econ, 2003).

Table 1: Growth trends in the manufacturing industry of the Free State, 1970 – 2002

Source: Urban-econ, 2003.	
Period	Manufacturing growth for period
1970-1975	5%
1975-1980	3.9%
1980-1985	0.6%
1985-1990	2.6%
1996-2002	-1.2%

In the Free State, there is an extremely high level of dependence on the primary sector - mining and agriculture (Department of Economic Affairs and Tourism, 1998) - which, given the absolute decline in the former and the poor performance of the latter is cause for concern, given that traditionally a significant proportion of the manufacturing system has focussed on servicing the needs of those two sectors or processing their products. It is also worth noting that many of the Free State's largest industries are branch plants of firms head-quartered elsewhere which reduces the long-term commitment of the company to the area and reduces their ability and willingness to involve themselves in local development issues.

# Key features of manufacturing enterprises in the Free State

### Establishments and employment

The changing macro-profile of the manufacturing economy of the Free State Province can be investigated in terms of both changes in the numbers of enterprises and the overall contribution of estimated total provincial manufacturing employment. Information for this analysis is drawn from UNISA's Bureau of Market Research's Industrial Register for 1994 and 2003, referred to above, which provides a comparative picture of how the manufacturing economy has evolved over a ten year period.

The analysis discloses that between 1994 and 2003 there was a near doubling in the total numbers of manufacturing establishments in Free State Province from 461 to 1014 enterprises and that the proportion of Small Medium and Micro-Enterprises (SMMEs) of total manufacturing establishments rose from 69% to 83% in 2003. This indicates the growing significance of SMMEs in terms of the overall manufacturing base of Free State Province. Correspondingly, it is evident that the relative share of large enterprises and of branch plants in the total population of industrial enterprises has declined through closure or rationalisation (Figure 3). It is critical to note that despite the increase in the number of manufacturing establishments, the picture in terms of its overall total manufacturing employment indicates only a marginal increase of 500 jobs between 1994 and 2003. This relatively stagnant picture of overall provincial manufacturing employment as a whole should be set against the parallel rise in significance of SMME manufacturing in terms of their share of total employment (Figure 3). In an earlier analysis it was shown that in the manufacturing SMME economy, the numbers of jobs nearly doubled from 10 200 in 1994 to 18 100 by 2003. Once again, the conclusion must be observed that in a stagnant provincial manufacturing economy, there is a growing significance of manufacturing SMMEs in terms of their contribution to the overall manufacturing economy, but a worrying decline in large firms. Indeed, between 1994-2003 the share of SMMEs in estimated total manufacturing employment in Free State rose from 20.1% to 38.9%. An important factor in this relative rise of the manufacturing SMME economy is the decline and closure of many large manufacturing enterprises (such as South African Breweries), and large enterprise restructuring strategies resulted in the closure of many branch plant establishments in the Free State between 1994-2003. Whilst this may well leave in place firms that are more committed to the area, significant economic loss has been experienced to date (Nel et al., 2004).

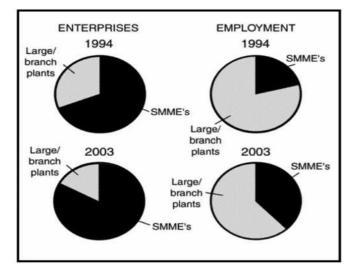


Figure 3: Changes in Manufacturing Plant Size and Employment, 1994-2003

# Source: Data derived from the BMR.

#### Key sectoral changes

It is evident from Figure 4 that significant changes can be seen in the sectoral composition or structure of the manufacturing economy of Free State. Between 1994 and 2003 a considerable shift was recorded in the provincial manufacturing economy, both as indexed by numbers of enterprises and total employment. In 1994 the leading sectors, ranked in terms of numbers of manufacturing establishments, were food, fabricated metals, non-metallic minerals and machinery. The dominance of the food sector is particularly striking in 1994, accounting for nearly one-third of all formal manufacturing establishments. The leading four sectors in total accounted for nearly two-thirds of all manufacturing establishments in 1994. Overall, it is shown that between 1994 and 2003 the largest growth in numbers of new manufacturing establishments occurred in the sectors of fabricated metals followed by clothing, other (mainly jewellery) and food. Of note, as revealed by the BMR register, is the remarkable burst of growth in new establishments in the clothing and textiles sectors between 1994 and 2003 and of the considerable growth of SMME fabricated metal establishments.

By 2003 the ranked order of sectors in terms of numbers of enterprises had changed. In 2003 the food sector remained numerically still the most common form of manufacturing establishment, albeit its share of total establishments had declined from nearly one-third in 1994 to 18% by 2003. In ranked order of the numbers of establishments by sector, the fabricated metals remains second in importance followed by the surge of clothing into the third most important sector by establishment numbers. According to the BMR register, the machinery sector slipped in significance from fourth position in 1994 to be replaced by 'other', a category of manufacturing which in the Free State is mainly led by small jewellery producers.

The profile of the sectors in the Free State manufacturing economy reveals a different picture when examined in terms of total employment data. It is evident that in 1994 the food and petro-chemicals sectors were the most important spheres of manufacturing in terms of total employment; indeed, in 1994 it is estimated that these two segments of industry accounted for nearly 50% of all Free State manufacturing employment. Significantly, the fabricated metals, machinery and other nonmetallic minerals sectors, which are prominent in terms of numbers of establishments are, of relatively smaller importance when measured by total employment. Of note also is that in 1994 the clothing and textiles sectors together represented only 6,5% of total manufacturing employment in Free State. By 2003 the profile of provincial manufacturing employment has changed markedly in terms of sectoral composition. Between 1994 and 2003 the most dramatic shift is the growth of clothing and textiles which taken together are now more important than the food sector in terms of total manufacturing employment. Indeed, between 1994 and 2003 the food sector actually records a downturn of nearly 1000 jobs. In addition to clothing and textiles, several other sectors record healthy increases in employment numbers between 1994 and 2003, including furniture, other and fabricated metals. As a result of these developments, the rank order of sectors in terms of contribution to total provincial manufacturing employment is changed. Overall, the food sector retains a narrow lead followed closely by clothing, oil/petro-chemicals, fabricated metals, furniture and textiles.

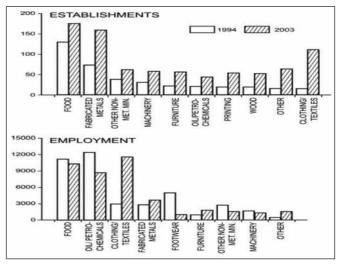


Figure 4: Changes in manufacturing firm type and employment, 1994-2003

Source: Data derived from the BMR

### Key spatial findings

In terms of the spatial distribution of production, the picture is clearly an uneven one. The Northern Free State contributes a significant 70% of the manufacturing output in the Free State, which underscores the dominance of the chemical and petroleum industry in the Sasolburg region (Urban-econ, 2003). However, only 4% of the Free State's manufacturing establishments are located there; and the area provides only 17% of the employment in manufacturing in the Free State. These figures clearly indicate that the manufacturing developments in Sasolburg are capitalintensive. The fact that Sasolburg's market and linkages lie across the Vaal river in Gauteng, leads to poor integration with the rest of the province's economy. In terms of the spatial location of firms, while only 4% (37 firms) are in Sasolburg, the Bloemfontein area has 27% (Department of Economic Affairs and Tourism, 1998; Urban-econ, 2000), whilst some 15 % are in each of the Harrismith-Phutaditihaba and Goldfields areas. Between 1994 and 2003 considerable changes occurred in the geographical structure of the Free State manufacturing economy. Figures 5 and 6 show the spatial distribution of total manufacturing enterprise and employment across the province on the basis of data calculated on a magisterial district basis. Figure 7 shows net change for the period 1994-2003 for numbers of enterprises and total employment.

Several key points emerge concerning spatial patterns and restructuring of manufacturing in Free State between 1994 and 2003. First, there has occurred a net growth in numbers of establishments, almost wholly accounted for by SMMEs rather than large firms, across many parts of the province. It is evident from Figure 5 that the greatest gains have been recorded in the Bloemfontein area with other notable expansion in enterprise numbers in Harrismith-Phuthaditjhaba and the Goldfields. Second, - and importantly - this growth in enterprise numbers is not reflected in terms of parallel expansion in manufacturing employment. Indeed, Figure 6 shows that whilst the numbers of establishments have expanded across many parts of the province, net growth in employment has occurred in only the Bloemfontein-Botshabelo-Thaba Nchu and Harrismith-Phuthaditjhaba clusters. Third, it is a striking finding that outside of these two clusters, with the exception of a few small towns, employment declines in manufacturing are recorded throughout the province with the largest declines taking places across the Northern Free State, including the Goldfields and Sasolburg (Figure 7). Four, the growing spatial concentration of manufacturing in the Free State is shown by the finding that together the two key clusters around Harrismith and Bloemfontein in 1994 accounted for 38% of provincial manufacturing employment whereas in 2003 their share of total manufacturing employment in the province had escalated to 56.1%. Marked declines are recorded in the relative contribution of other centers to total employment in the province; most notable are for small towns as a whole from 15.2 to 11.1%; for Sasolburg from 24.6 to 18.3%; for the Goldfields from 11.5 to 9.4%; for Kroonstad from 5.6 to 2.6%; and, Bethlehem from 4.4 to 2.6% (Figure 7).

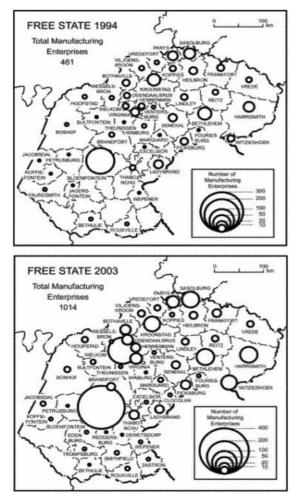


Figure 5: The Location and Numbers of Manufacturing Enterprises: 1994-2003 Source: Data derived from the BMR

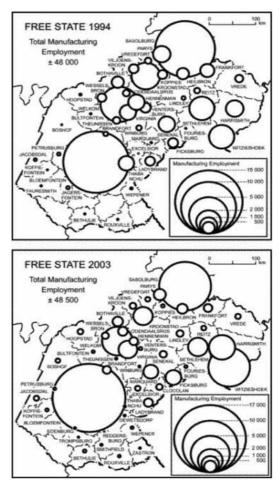


Figure 6: Manufacturing Employment and Location: 1994-2003 Source: BMR, 2004

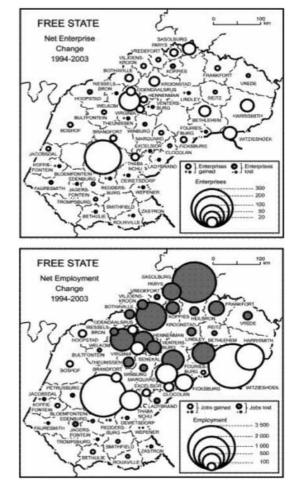


Figure 7: Employment Change by Sub-Region, 1994-2003 Source: Data derived from the BMR

### Perceptions of large firms

For purposes of developing a profile of the perceptions of manufacturers in the Free State two surveys were undertaken, firstly one of the larger firms, employing more than 200 workers and secondly of the numerous manufacturing SMMEs, many of which have developed in recent years. The reason for the distinction was to capture the very real differences which exist in terms of operational issues between mega-firms like SASOL and the smaller operations with only a handful of staff members. In addition the very real growth noted in SMME operations above in itself justifies this distinction.

In terms of the larger firms, 30 of the 54 businesses with more than 200 employees in the province were interviewed. A 100% sample was attempted but not attained. SASOL and Natref (the National Refinery) in Sasolburg were both purposively selected to ensure that the views of the two most important industries in the province were captured. From the outset of this analysis it is worth pointing out that the 54 firms only account for 5.3% of the province's manufacturing firms, but they do account for 54% of manufacturing employment. SASOL alone employs some 6000 workers. In terms of location 43% of large firms operate in the Bloemfontein – Botshabelo – Thaba Nchu municipal area, 24% in Harrismith-Qwaqwa and 17% in Sasolburg (Nel *et al.*, 2004).

When asked why they started operations the two most common answers were access to labour (often referred to as cheap labour) noted by 24% of respondents and proximity to raw materials- 20% of respondents. These considerations confirm the notion that the Free State is relative marginal in the space economy in terms of having established in what was originally a cheaper labour area and being significantly reliant on basic, raw material type of operations. Less significant locational considerations, which all scored 12% were centrality, government incentives, infrastructure and proximity to home. In terms of the date of establishment, it is significant that 18 of the firms were established since 1980, but secondly that 12 of those chose to locate in former Homeland growth points, either because of previous regional support or current Free State Development Corporation assistance. This indicates the degree to which state intervention, both past and present has impacted on the location and establishment of larger firms in the province. This applies to the establishment of the Sasolburg complex, support for Homeland industrial points and more recently support of the Free State Development Corporation which especially targets support to firms establishing in former growth points, where, what have become low rentals on older building stock has now emerged as a key locational attraction (Nel et al., 2004).

It is interesting to note that, despite the importance attached to raw materials, in terms of input-output analysis, the surveyed firms only source 32% of their inputs provincially (which would strongly reflect on the food sector and the SASOL complex) and only sell 20% of produce locally. This does suggest an overall weakly embedded large manufacturing base. In terms of sectoral considerations, some 45% are in the textile industry, 18% in agro-processing / food and 10% in petro-chemicals. These figures indicate significant reliance on the textile industry which is currently extremely vulnerable to importation challenges. Quite clearly the dominant cluster in terms of size is that of petro-chemicals in Sasolburg, however outside of the 5 or 6 major employers there, there appears to be almost no significant downstreaming evident to date in that cluster. In terms of current operations 11 of the 30 are branch plants, which does indicate potential vulnerability to market shifts and, worryingly, 37% now question their original decision to start operations in the Province. Key problems experienced include poor access to markets, poor skills levels and poor transport infrastructure. More general concerns noted include the failure of many local governments to maintain infrastructure, provincial political in-fighting, union activity, foreign competition, the prevailing exchange rate and government interference (Nel et al, 2004).

In terms of the overall profile of larger firms, it would appear that state involvement at some point was influential and that these firms are very important to the provincial economy in terms of jobs provided and economic activity generated. However, not all of the firms appear to be that strongly embedded in the provincial economy as there is a high reliance on the vulnerable textile and clothing sector. Firms are facing numerous constraints and the aforementioned reduction in the overall contribution of larger firms to the provincial economy is cause for some concern. Despite these concerns, nearly half of firms are considering expansion. Given the dependence of manufacturing on reliable and sound infrastructure and services, the onus will clearly be on municipalities to try and continue to meet the needs of firms.

### Perceptions of SMMEs

The SMME sector is one which has received significant acknowledgement and some degree of support nationally The overall growth in the actual number of manufacturing SMMEs and their percentage share of all manufacturing firms in the Province is noteworthy. In total over 140 SMMEs were interviewed in 2003 and 2004 for purposes of this study. Key findings noted include the significant spatial concentration of activities in the Bloemfontein and Harrismith areas and decline of the food sector relative to significant growth in the clothing sector. Linkage to the vulnerable textile sector, economic decline in the Goldfields area and stagnation in the provincial and local economies are all viewed very negatively by SMMEs. Concerns faced, particularly by emerging firms, are key shortages of finance, equipment, machinery, tools and workspace. Few firms sell outside of the Province and while the number of firms has increased, individual firms don't seem to be expanding the scope of their operations or the scale of their employment (Nel et al., 2004). A parallel study into manufacturing SMMEs (Rogerson, 2005) revealed that while positive attraction for firms in the Province include accessibility to agricultural inputs, lifestyle considerations and cheap labour, negative considerations include: economic stagnation in the province, distance to markets, lack of government support, poor infrastructure and limited local skills. As a net result some 16% of firms are considering closure or relocation (Rogerson, 2005).

### Key sectoral considerations

Over and above considerations of scale, given how dependent the manufacturing economy is on a selected sectors, comment on trends in the four key sectors, namely clothing/textiles, petro-chemical, jewellery and food/agro-industry sectors is justified.

The clothing and textile sector expanded impressively in the period from 1994 to 2003, gaining 100 new firms and some 8 500 new jobs. A clear clustering in the Bloemfontein and Harrismith municipal areas is evident. It is of interest to note that many of the operations are small-scale and foreign owned – primarily by Chinese and Taiwanese nationals and they are often branch plants. Despite the opportunities presented for export and by the Africa Growth and Opportunities Act (AGOA) in particular, production is, almost exclusively, focused on the domestic market. Many firms interviewed are concerned about the future, particularly in terms of cheap foreign imports, prompting concerns about 'melt down' in the sector. It has been noted that some firms have closed or in fact moved to Lesotho with its cheaper labour costs. In fact many firms have shed jobs in the last few years, which does not bode well for the future (Nel *et al.*, 2004).

The petro-chemical sector is one of the key anchors of the provincial economy. It is however one which is highly spatially focused and linked into the economy of Gauteng and beyond rather than the Free State, with a significant proportion of SASOL's chemical sales in fact being to global markets. While the province clearly benefits from jobs created and revenues generated, most sales, many inputs and potential spinoffs are associated with Gauteng. The limited local spinoff effect is vividly illustrated by the fact that only 4% of petro-chemical jobs in Sasolburg are in SMMEs.

An emerging sector and one which enjoys the endorsement of the national and provincial governments is the jewellery manufacturing sector in Virginia. At present two firms which employ nearly 1000 people operate in the area. While the availability of gold and labour are attractive locational variables, both firms are affected by low skills levels and poor local infrastructure. This sector clearly holds significant potential benefits for the province if supported further.

The last major sector to be considered here is that of food /agro-industry. Between 1994 and 2003, the number of firms increased significantly from 130 to 170, however the actual number of jobs fell from 10 500 to 10 000 and, relative to the expansion of the textile/clothing industry, the proportion of all firms in this sector fell from 33 to 18% of the provincial total. At present 10 large firms and 160 SMMEs are operating, all of which are highly dependent on the local farming sector. Interviews however revealed concerns about the future linked to issues such as the vulnerability of the agricultural sector, farm attacks and climatic change (Nel *et al.*, 2004).

Overall the study of the four leading sector indicates a rather unstable future. While the two mineral based sectors – jewellery and petro-chemical, though unlikely to expand significantly seem set to remain as key anchors in the economy, the key textile/clothing and food/agro-industries sectors appear to have less of a secure future and changes in the former in particular could have dramatic effects on the provincial economy.

### Future concerns facing manufacturing in the Free State

Current and potential future manufacturing growth areas identified by the DTI in the Free State are in: machinery and equipment, floriculture, fruit and vegetables, leather tanning and finishing, jewellery manufacture and downstreaming from petro-chemicals (DTI, 2002). However as noted above, the food sector is vulnerable, and few downstream opportunities have been created in petro-chemicals, presumably because of the capital-intensive nature of the sector.

Key issues which will clearly impact on the nature and future of the manufacturing industry in the province and its ability to create jobs and associated economic spinoffs, both positive and negative are:

- rationalisation of the industrial base in Qwaqwa, Harrismith and Botshabelo following the termination of the Regional Industrial Development Programme in the early 1990s and its current re-use under the auspices of the Free State Development Corporation.
- the closure of mines in the Goldfields with consequent impacts on supplying and downstream industries.
- weakening of the agricultural base and related agro-industries.
- effects of cross-border industrial development in Lesotho, potentially diverting the location of labour intensive firms to an area with lower labour costs.
- the absence of national SDIs and IDZs in the province.
- key links between the petro-chemical base in Sasolburg and the Gauteng complex.
- the positive effects of small business support programmes.

Key programmes and development initiatives which are either being initiated or considered by the provincial and national governments include: a proposed Industrial Development Zone (IDZ) at Botshabelo (Urban-econ, 2000), further support for the down-streaming of petro-chemical production to small manufacturing, supply and servicing firms at the 'Chemcity' site in Sasolburg (Department of Economic Affairs and Tourism, 1998), support for the emerging gold jewellery cluster in Virginia clustered around the Harmony gold refinery, and support for leather industries in Sasolburg and pharmaceutical industries in the Province generally (Department of Economic Affairs and Tourism, 1998). The provincial Department of Economic Affairs and Tourism (1998) also proposes the establishment of four development corridors or clusters, namely:

- a jewellery corridor in Welkom;
- a Bloemfontein/Botshabelo/Thaba Nchu corridor;
- an Eastern Free State / Lesotho tourism corridor; and
- a Free State / North West farming machinery cluster.

Given concerns raised about the future of textile/clothing sector and the to date limited downstreaming from the petro-chemical cluster, support to encourage diversification and both consolidation is clearly of critical importance, given what would seem to the somewhat precarious position of certain key sectors of the manufacturing economy, which should downscaling occur, will impact negatively on the many localities.

### Assessment and conclusion

Overall, therefore, between 1994-2003, despite a marked increase in the number of manufacturing establishments, the analysis discloses that only marginal net employment growth has occurred in the formal Free State manufacturing economy. Another key finding is that, between 1994-2003, the relative significance of large manufacturing plants and branch plants declined in significance for the Free State manufacturing economy. This is a worrying trend since the absence of sufficient 'propulsive' industries can retard overall growth and the benefits of the spinoff effects from large operations. Correspondingly, the importance of SMME manufacturing in the overall provincial manufacturing economy has been enhanced, albeit the overall employment spin-offs seem to be rather limited. Whilst the growth of SMMEs is to be welcomed and they are likely to be more permanent than branch plants, they have not, unfortunately, impacted significantly on employment to date and appear to be vulnerable to market shifts. Sectorally, textile and clothing have expanded dramatically while other sectors such as fabricated metals have retained their status. The significant

growth of the former, which is seemingly on the point of downsizing in the face of foreign exports could have negative implications for the province.

The analysis of spatial change highlights strongly the significance of the two clusters of manufacturing based around Bloemfontein and Harrismith-Phuthaditjhaba. It is only these two clusters that have exhibited any signs of vibrancy for the manufacturing economy in recent years, albeit that the dependence on clothing/textiles in the latter is a potential vulnerability. The stagnation and in many cases decline of manufacturing across much of the rest of the province is clearly in evidence, even in the key petro-chemical cluster. The expansion in SMMEs has not compensated for the declines which have taken place through downsizing and closures of the province's large enterprises and branch plants in the period 1994-2003. The long-term prospects of once key areas such as the Goldfields is clear a cause of considerable concern.

Overall the manufacturing sector in the Free State reveals the profile of a sector which is spatially concentrated and sectorally focused on production with close raw material links or labour intensive operations. Local linkages for the textile/clothing sector are very weak and recent and potential future closures will have key spatial and employment impacts. The historical importance of state intervention exerted a defining impact over the location of firms, one which now in a neoliberal era tends to make these historical cores vulnerable to the effects of market forces. Key concerns relate to the need to retain and expand the employment base, to try and diverse production, to ensure that necessary infrastructure is maintained and expanded and to effectively use the not inconsiderable industrial estates bequeathed by apartheid planning.

At a broader level of analysis, it would seem that the Free State is a 'lagging region' (Ilbery et al., 2004) and one which has not fully established itself in terms of network development and the development of self-sustaining territorial complexes, with the possible exception of the Sasolburg area (Cabus, 2001). Low skills levels, distance to markets and vulnerability to globalization, particular in the case of the clothing and textile industry, do not bode well and suggest that the province has only limited capacity to participate in an increasingly competitive and fluid globalizing economy. Lack of integration at this level, except for petro-chemicals, local reliance on the vulnerable mineral and agriculture sectors and the uncertain future of textile and clothing put the issue of the need to ensure survival for the area, as opposed to its assured prosperity, on the table. This situation is catalysed by the absence or the weakly developed nature of the spatial, skill and product attributes needed to prosper in a globalizing economy, which now increasingly favours manufacturing concentration in metropolitan and coastal locations for export purposes (Knox et al., 2004). In terms of the future, it will be difficult for the Free State to alter its growth path significantly from its traditional association with the MEC, and as Cassim (1988) notes historical and global issues frame the context and nature of future development. In all eventuality the Bloemfontein, Harrismith, Sasolburg cores will retain their dominance of the manufacturing sector, albeit that they will experience inevitable sectorally specific declines, while other areas, and the Goldfields in particular will continue the slow process of employment and manufacturing attrition.

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