

SUPPLY AND DEMAND BALANCE OF THE CURRENT VCB INDUSTRY

The current supply and demand balance for the VCB industry was calculated to be as follows:

Retailer category	Spending on bags R million	Bags consumed (billion)	Conversion, exports and imports (units and tonnage)	Average weight per bag (g)	Polymer usage tonnes
Large retailer groups	202	2.552	Domestic 44000t (7.736 m bags)	5,87	14728
Smaller retailers Printed bags	181.09	2.314	Exports 6000t (560 m bags)	5.87	13740
Smaller retailers Unprinted	188.45	3.158	Imports 400t (1.32 m bags)	4.35	13587
Total	571.54	8.024			42055

It is worthwhile pointing out that the supply and demand balance was calculated and verified from two angles, namely based on retailer demand data as well as based on raw material supply.

There is great uncertainty on the number of bags currently being imported, and the estimate of 4500 tonnes can be considered to be a “upper limit” estimate. It is noteworthy that it is not only thin (estimated to be as thin as 10i), low quality plain bags that are being imported. It has come to the attention to the Study Team that one of the largest retailer groups are importing large quantities of higher quality printed bags. More details could however not be obtained.

THE KEY CHARACTERISTICS OF THE CURRENT VCB MANUFACTURING INDUSTRY

Polymer production

There are only two manufacturers of polymer in South Africa. In the case of ethylene based polymers there is only a single manufacturer of each product and in the case on polypropylene, both parties are involved in its manufacture. Only the polyethylenes are of interest in this assessment.

The table below depicts the current supply and demand balances for ethylene based polymers.

Polymer	Domestic Capacity/ tpa	Domestic Demand	Imports	Exports	Surplus/ (Shortage)
HDPE	165,000	155,000	-	10,000	+10,000
LDPE	95,000	115,000	20,000	-	-20,000
LLDPE	90,000	110,000	20,000	-	-20,000

Due to the ethylene shortage, South Africa is unable to provide more domestically produced polymer into the local market – at least in the short term while the monomer shortage continues to exist. Any additional demand for polymer will have to be met through imports and any upstream expansion will initially have to address the ethylene shortage. Further capital investment will take the form of expanding capacity of all ethylene based polymers i.e. HDPE, LDPE and LLDPE (some is debottlenecking only, other is new plant).

VCB manufacturing (conversion)

The research identified 42 companies with a combined production of 44 000 tons per annum. The companies range from very small operations with turnover of less than R 5 million per annum, and employing less than 15 people, to large companies with annual turnovers in excess of R 200 million, and employing up to 500 people. The total value of the industry is in the region of R 550 million per annum.

The VCB manufacturing industry displays the typical characteristics of a mature commodity industry, operating primarily in a limited domestic market, as follows:

- There are a small number (6) of large companies that have significant (70 - 75%) market share. Being in a commodity market these companies cannot compete with each other on a product differentiation basis, and have to compete on efficiencies
- There are a large number (36) of small companies that seek out the niches in the market that is not served by the large manufacturers. The niche markets are created by the need of smaller retailers who require small quantities of printed bags (large manufacturers have “minimum runs”)

or “plain” carrier bags. The demand for “plain carrier bags is driven by retailers who have no need for printed bags, wants to spend the absolute minimum on bags, and are not as quality conscious.

It is important to notice that barriers to entry to the industry is low (A capital outlay of less than R 500 000 is sufficient), henceforth the large number of SME’s in the industry.

Other key characteristics of the industry are as follows:

- The VCB manufacturing industry is a specialised industry in that company’s that manufacture VCB’s do not produce large volumes of other products as well. 88% of total production is for VCB’s only, and further analysis of the data reveals that the other 12% is plastic film.
- Technology and age of equipment varies considerably within the industry. Small and medium sized companies in general use technology that is two generations older than that used by the large manufacturers. Equipment in general has a long (20 to 30 years) life span, and even the oldest technology is use have at least 10 years remaining life.
- There is limited (less than 5%) excess capacity within the industry.
- Limited data was supplied by converters on historic capital investment, but it is known that at least R 120 million have been invested over the last 10 years, and the current book value of equipment is in excess of R 50 million
- Only one company indicated that any capital investments have been made in anticipation of the proposed regulations. This is due to the uncertainty about what minimum thickness will be specified. It is worthwhile noting from the outset that a 80i bag is a very different product to a 30i bag, and requires completely different manufacturing equipment. It is not possible to change existing equipment to manufacture firstly at 30i and then at 80i.
- All but one of the companies surveyed indicated that they have placed capital investments on hold until the uncertainty about the regulations have been resolved. One companies provided evidence to the Study Team of a planned capital investment not materialising due to banks refusing finance until such time as the regulations promulgated.
- Manufacturing costs vary significantly between manufacturing companies, but being a commodity industry is driven by raw material cost, which constitutes approximately 60% of the total product cost, Labour costs add another 20% and the remaining 20% is made up of various items such as consumables, rent, energy, etc. The weighted average revenue per tonne was determined to be R 13 581.

Employment in the VCB Manufacturing Industry

Information on employment in the VCB industry and the possible implications that the proposed regulations might have was collected through two primary channels. First, detailed questions on labour were included in the questionnaire sent to all known VCB manufactures. This source of information

while important was limited because most companies were unable or unwilling to provide the requested data. A second source of information was that provided by detailed interviews with 16 shop stewards. The analysis of labour draws on both these sources plus a small number of interviews with trade union officials and an official of the Metal and Engineering Industries Bargaining Council (MEIBC).

The VCB Manufacturing Industry

The VCB Manufacturing industry can be divided into two segments.

- The High Productivity Segment of the industry pursues efficient production. It is characterised by high capital intensity, high productivity (as measured in tonnes converted per employee), relatively high wages, and generally better working conditions (for example health and safety). This segment accounts for 72.2% of VCB production (by tonnes).
- The Low Productivity Segment of the industry pursues niche markets. It is characterised by low capital intensity, low productivity (as measured in tonnes converted per employee), low wages, and poor working conditions. Its survival depends on the security of its niche markets from the High Productivity Segment and its ability to source cheap labour. This segment accounts for 27.8% of VCB production (by tonnes).

The following table summarises the data on productivity, minimum wage levels, and the average size of sites on which data was obtained in the two segments.

Variable	High Productivity Segment (5 sites)	Low Productivity Segment (10 sites)
Total VCB tonnage	31,780	5,958
VCB employment	766	469
Productivity (tonnes per employee)	41.5	12.7
Average number of VCB related employees per site	153	47
Average (un-weighted) minimum wage (Rands per hour)	10.1	4.8 (information from five sites only)
Range of minimum wage (Rands per hour)	9.01 – 11.82	2.65 – 7.73

Employment in the VCB Industry

Employment in the VCB industry is estimated at between 1,700 and 2,000. Of this employment, it is calculated that approximately 750 are employed in the High Productivity Segment and between 950 and 1,250 in the Low Productivity Segment. The majority of employees in the industry (65%) are employed in three occupational categories – film blowing, printing, and bag making and packing. These, and a number of other occupational categories in the industry, are low or semi-skilled. They are remunerated at or slightly above minimum wage levels in the industry.

The majority of employees in the industry were estimated to be male (73%), African (64%), and between the ages of 26 and 45 (71%).

Remuneration in the VCB Industry

In the High Productivity Segment of the industry minimum wages range between nine and 12 Rand per hour. In the Low Productivity Segment of the industry minimum wages range between 2.65 and eight Rand per hour. Take home pay is based on workers' grade (the industry falls under the MEIBC), the actual level of wages paid by their company, and the number of hours worked. Because of the nature of the industry machines are generally kept running 24 hours a day. In the High Productivity Segment of the industry the operation of up to four shifts limits overtime. In the Low Productivity Segment of the industry there are generally less shifts. As a consequence workers in this segment often work considerable overtime. This is, in terms of income, offset by lower wage levels.

When workers' dependants are taken into consideration, the average monthly disposable income per member of their family unit (including all other sources of income) is R428 in the High Productivity Segment of the industry and R332 in the Low Productivity Segment of the industry.

Retrenchment and Re-employment

Many workers in the industry are migrant workers. Most workers indicated that they would be willing to relocate with the RSA to find employment. Despite this it is concluded that the prospects of re-employment for these workers is limited. It is estimated that approximately 85% of employees in the Low Productivity Segment and approximately 77% of employees in the High Productivity Segment would *not* find employment if they were retrenched.

For the majority of these workers, retrenchment and the loss of their wage would push them and their dependants below internationally defined poverty levels.

The retail industry

The demand for VCB's within different segments of the retail industry can be summarised as follows:

Retailer category	Key characteristics	Spending on bags R million	Bags consumed (billion)
Large retailer groups	Use printed bags primarily manufactured from virgin material	202	2.552
Smaller retailers – Printed	Use printed bags primarily manufactured from virgin material	181.09	2.314
Smaller retailers Unprinted	Use unprinted "plain" bags manufactured with a high recycle content	188.45	3.158
Total		571.54	8.024