

OVERARCHING FINDINGS AND RECOMMENDATIONS

1 INTRODUCTION

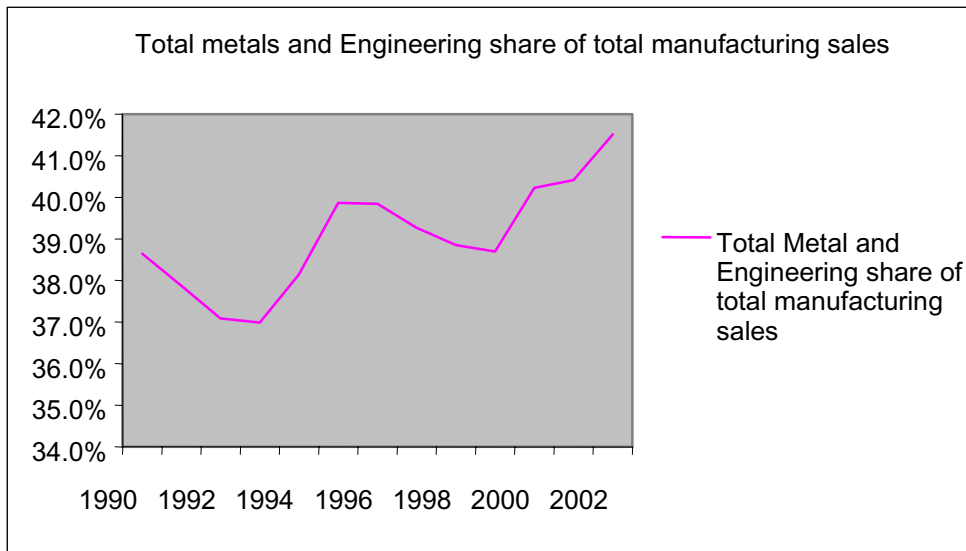
The metals and engineering industry for the purposes of this study incorporate the sectors represented within the Metals and Engineering Industries Bargaining Council (MEIBC), namely:

- ❑ Electronics and Electrical Engineering;
- ❑ Machinery and Equipment;
- ❑ Basic Metals;
- ❑ Heavy and Light Engineering (incorporating Metal Products and Fabrication as well as the automotive components sectors); and
- ❑ Plastics Converters.

These sectors constitute a sizeable portion of South Africa's manufacturing sector. As such there is little doubt that South Africa's success as a manufacturing economy is closely allied with the success of this industry.

According to official statistics, in 2002, the Metals and Engineering industry constituted 29.3% of formal manufacturing employment – a total of 371 000 jobs (Source: IDC 2002). This is despite an 11.7% decline in employment levels over the last decade (ibid). Over the period 1999-2002, employment loss appears to have slowed with official data showing a decline of 0.5%. This is comparatively better than the general manufacturing sector that experienced a loss of 3.5% jobs in the same period, bringing total manufacturing job loss to 173 960 (ibid). Simultaneously, as shown in Figure 6, the industry has also increased its share of total manufacturing sales from 37.8% in 1992 to 41.5% in 2002 with much of the growth coming over the period of this study, namely 1999-2002.

Figure 4: Metals and Engineering share of total manufacturing sales, 1990-2002



Source: IDC, 2002

It has been the over-riding objective of this project to identify and formulate job creation strategies for these sectors. This section of the report focuses on the broad policy and strategic conclusions that we have drawn from our comprehensive research, survey and interview work and consultation process. In addition each of the sectors is reported on in detail in separate chapters where more sector-specific interventions and strategies are elaborated upon.

- ❑ Section Two of this report reviews current employment trends in the sectors. On the basis of these trends and the analysis presented in greater detail in the sector reports, the section concludes by proposing a framework for prioritising areas in which employment creation is likely to be more significant.
- ❑ Section Three reviews what has driven and/or impeded employment creation in the metals and engineering industry. It makes recommendations as to what interventions may be undertaken to enhance employment creation. The recommendations in this section are harnessed to the overall direction established in Section Two. However as many of these proposals tackle impediments to employment creation that are generic across the sectors and because the metals and engineering industry constitutes such a significant proportion of the manufacturing sector, the proposals are likely to have a wider-spread application than simply the priority sectors.

2 EMPLOYMENT TRENDS

2.1 Overview

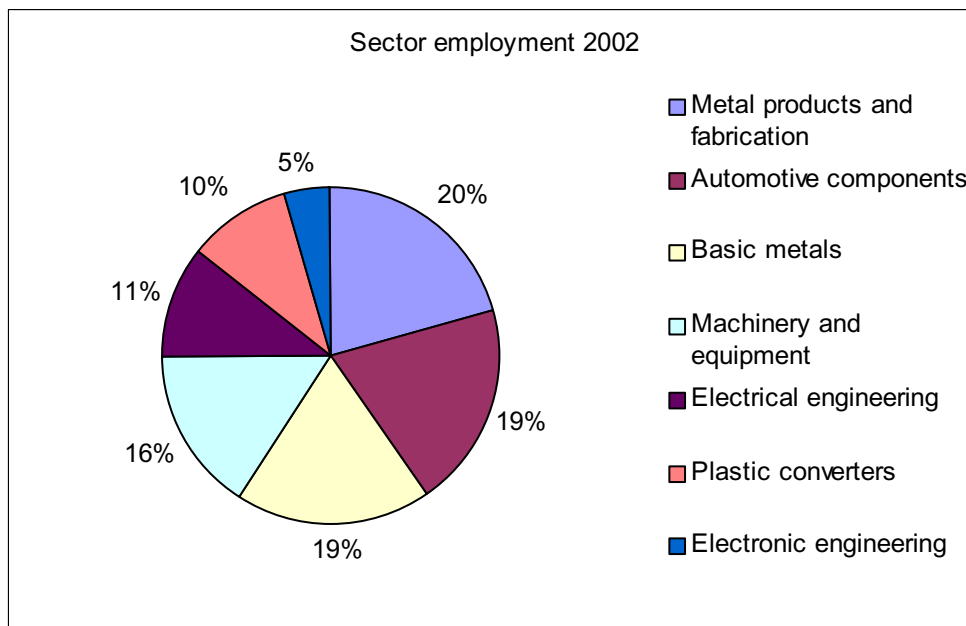
2.1.1 Employment in the metals and engineering industries

According to the survey conducted as part of this study, Metals and Engineering employment grew by 1.9% compound annual growth rate (CAGR) between 1999 and 2002. However, during the same period, permanent employment declined annually by 5.6%. This was offset by increases in atypical employment – casual, temporary and subcontracted labour – which, as detailed in Table 2, grew considerably between 1999 and 2002. Indeed atypical employment has been the primary driver of employment growth in these sectors.

Within the Metals and engineering industry the three most important sectors in terms of the absolute number of people employed, as can be seen from Figure 5 are:

- Metal products and fabrication;
- Auto components
- Basic metals

Figure 5: Contribution of each sector to total metals and engineering employment, 2002



However, it is impossible to evaluate the importance of these sectors to the future of South African manufacturing purely on the basis of their absolute size. As can be seen from the table below, it is the downstream sectors – metal products and fabrication, automotive components and plastic conversion – that have grown employment since 1999².

Table 1: Employment growth in the metals and engineering industry, 1999-2002

Sector	Employment Compound Annual Growth Rate, 1999-2002
Metal products and fabrication	8%
Automotive components	4%
Plastic converters	4%
Electrical engineering	-1%
Basic metals	-3%
Machinery and equipment	-5%
Electronic engineering	-8%

The basic metals, machinery and equipment and the electronic engineering sectors have all been big job losers, for reasons that are elaborated upon in each of the sector reports, over the past three years. Much of this job loss has been driven by significant decreases in the number of permanent employees in each of these sectors. Employment losses within previously large companies have been a strong driver of this trend in each of these sectors.

² Note that these figures include all forms of employment; permanent, casual, temporary and sub-contracted.

Table 2: Trends in permanent employment, metals and engineering industry, 1999-2002

Sector	Type of employment	Sector employment 1999	Sector employment 2002	CAGR
Electronic engineering	Permanent employees (FT and PT)	23850	16660	-11%
Machinery and equipment	Permanent employees (FT and PT)	72346	55951	-8%
Basic metals	Permanent employees (FT and PT)	79675	70200	-4%
Electrical engineering	Permanent employees (FT and PT)	42130	41187	-1%
Metal products and fabrication	Permanent employees (FT and PT)	64329	67434	2%
Plastic converters	Permanent employees (FT and PT)	32992	35601	3%
Automotive components	Permanent employees (FT and PT)	67199	74043	3%

Increases in atypical employment have both served to offset more substantial declines in these sectors as well as increase employment in the job creating sectors. Indeed as seen, in Figure 6 below, the machinery and equipment sector and the electronic engineering sector are also characterised by high levels of atypical employment. Thus employees in these sectors have experienced both a decline in the absolute number of employment opportunities as well as increasingly unstable employment relationships.

2.1.2 Structure of employment

As a result of the growth rates detailed in Table 4 the structure of employment in the metals and engineering industry altered over the survey period, to the extent that atypical employment increased from 3% to 10% of the total Metals and Engineering employment. Despite this increase, it is clear that permanent employment continues to account for the overwhelming majority of employment in these sectors. Thus any strategy adopted for this sector needs to balance the predominance of permanent employment in the sector with the extremely rapid growth of atypical forms of employment.

Table 3: Trends in atypical employment, metals and engineering 1999-2002

Metals and engineering	Sector employment 1999	Sector employment 2002	Compound Annual Growth Rate
Permanent employees (FT and PT)	97%	90%	-2%
Casual labour	0%	1%	55%
Temporary labour	1%	1%	12%
Sub contracted labour	2%	7%	62%

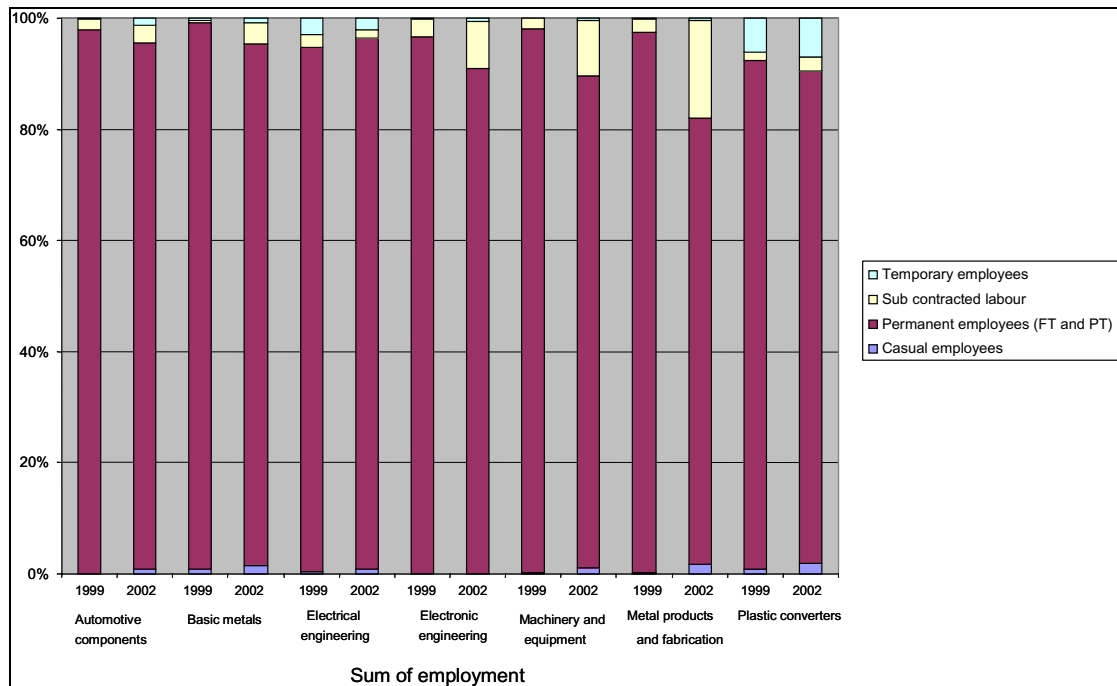
The primary drivers of increased atypical employment across metals and engineering have been the metal products and fabrication and machinery and equipment sector. The metal products and fabrication sector in particular, is characterised by a fairly high proportion of project work, resulting in peaks and troughs of demand that in turn has created a need for greater flexibility in the management of workforce numbers. Both of these sectors are large employers and have seen atypical employment increase to greater than 10% of total employment³. As Figure 6 demonstrates, the plastics conversion sector has experienced a similar dynamic, although:

1. As a smaller absolute employer within metals and engineering it has not had as significant an impact on the overall sector trend; and
2. Atypical employment within this sector has been driven by increases in temporary labour in contrast with the rest of the sector where sub-contracting has been a more predominant force in the changing structure of employment.

³ Note that the trend in metal fabrication has been strongly influenced by outliers:

- Two firms collectively employed 73% of all casual employees in the sample;
- Another two firms collectively employed all temporary employees in the sample; and
- Another two collectively employed 75% of all sub contracting employees in the sample.

Figure 6: Structure of employment in the metals and engineering industry, 1999-2002



Interestingly, the electrical engineering sub-sector experienced a decline in atypical employment over the same period. However, much of this trend was driven by declines in atypical employment in large employers within the sub-sector and for the rest of the sub-sector atypical employment remains a growing phenomenon.

The metal products and fabrication sector is an interesting mix of trends for while it has the largest percentage of total employment being constituted by atypical employment⁴, permanent employment (as demonstrated by Table 2 above) also grew between 1999-2002. Increases in permanent employment accounted for 18% of jobs created over the survey period in this sector. Accordingly in achieving the balance discussed above it is clear that the strategies adopted cannot unduly promote one employment type for, as this example demonstrates, they often co-exist.

The increase in atypical employment has come in response to a number of pressures:

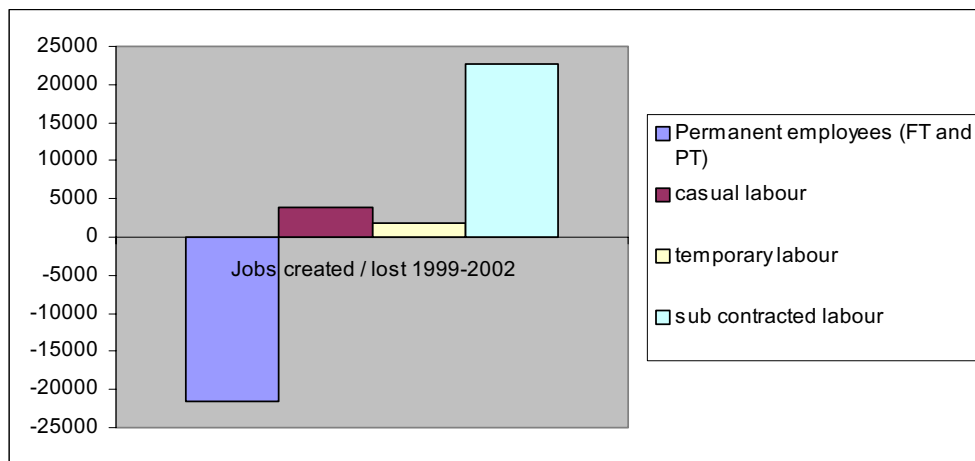
1. The outsourcing of non-core activities, such as cleaning, security and canteen services, in order to reduce costs and administrative burdens;
2. The need to manage labour costs in sectors which are project driven, such as metal fabrication, or are subject to large fluctuations in levels of demand;

⁴ Note that the large trend in atypical employment growth is driven largely by one company that accounted for 57% of the growth in that category. However, qualitative interviews did confirm a trend towards subcontracting although it may not be as marked as suggested by these figures.

3. Exchange rate volatility that has made it difficult for employers to forecast the sustainability of demand from export markets and thus have avoided permanently employing people to minimise the risk should increased export demand prove to be unsustainably; and
4. Employers have sought to avoid the perceived costs of CCMA cases.

Thus while permanent employment continues to predominate, as Figure 7 below demonstrates, it is atypical forms of employment that have driven job gains across the metals and engineering industry.

Figure 7: Changes in employment types, 1999-2002



Therefore the increasing importance of atypical employment across the sector will undoubtedly have to be taken into consideration in the formulation of strategy.

Our survey also investigated the racial and gender dimension of employment in the industry. It is clear from our results that, if indeed the South African labour market is being transformed, it is at a slow pace. Figure 8 and Figure 9 below are examples from the least transformed of the sectors we investigated, the Basic Metals sector. They are indicative of this slow progress in breaking down the legacy of past prejudicial policies. Figure 8 below shows how white males dominate professional, skilled and managerial positions.

Figure 8: Occupational categories by race, basic metals 2002

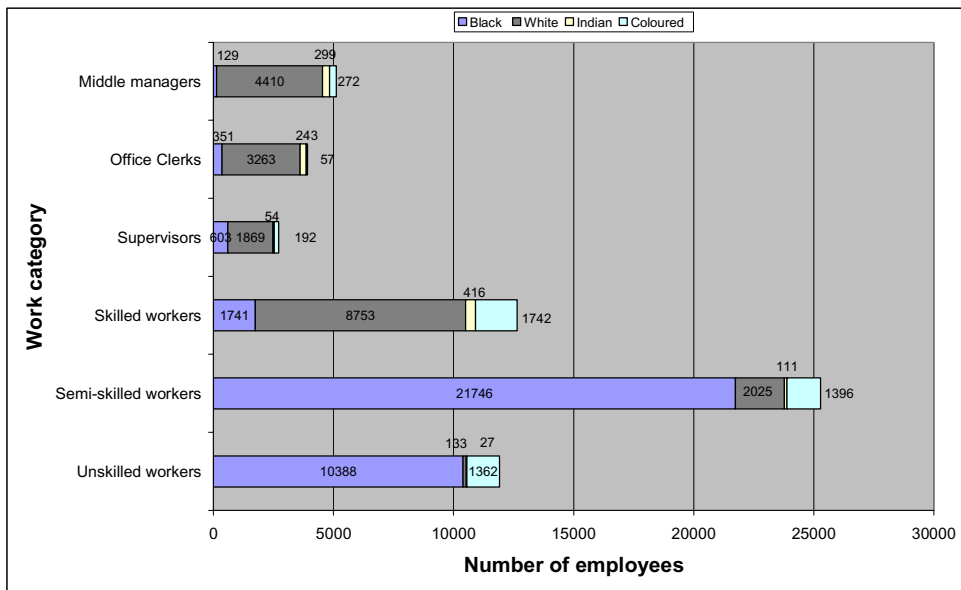
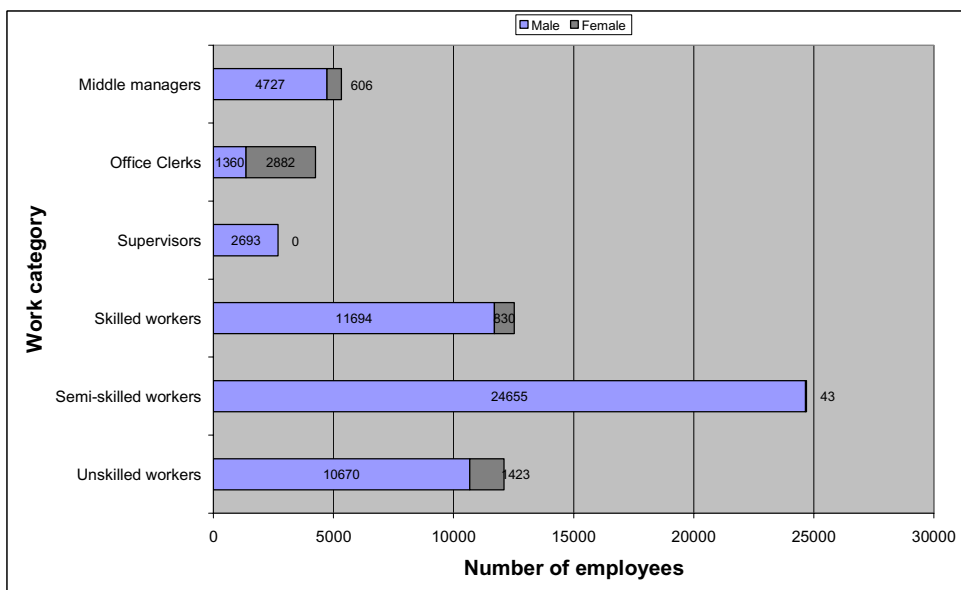


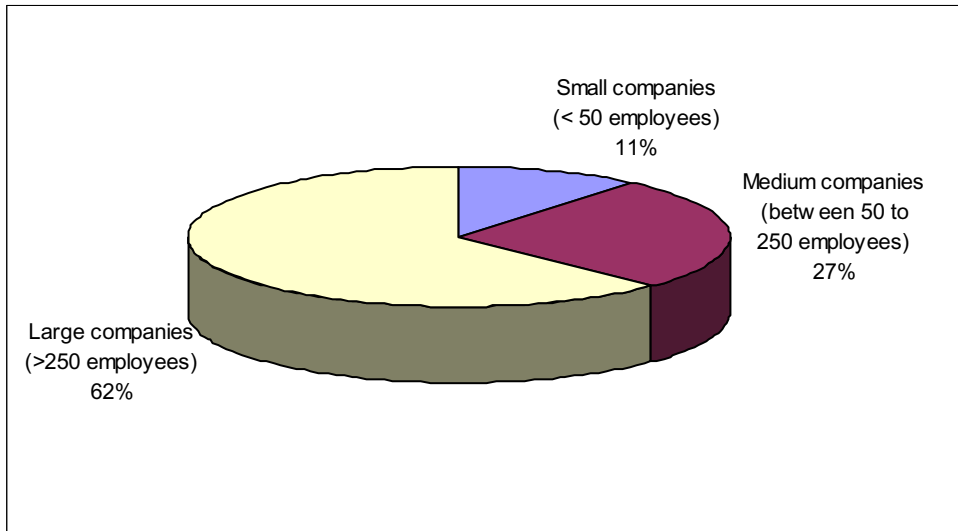
Figure 9 shows how women remain concentrated in the traditional domains of clerical work. While companies that were part of the survey attested to the fact that they are implementing the Employment Equity Act on their shop floors and in their offices, we believe that the indications are such that progress towards the de-racialisation of the workplace is not being sufficiently addressed.

Figure 9: Occupational category by gender, basic metals 2002



With respect to company size and employment, Figure 10 illustrates that in the sample, large companies are responsible for the bulk of employment in the metals and engineering industries. Thus it is critical to ensure that the business environment is conducive to the needs of large companies.

Figure 10. Percentage of employment accounted for by small, medium and large companies in the Metals and Engineering industries sample, 2002



2.2 A framework for employment creation

2.2.1 Growing employment

The above analysis has revealed that downstream manufacturing have been the primary drivers of both total employment and permanent employment growth within the metals and engineering industry. The three growing sectors – plastic converters, metal products and fabrication and automotive components – between them account for 49% of total metals and engineering employment. In this context there can be little doubt that the general principle of encouraging downstream manufacturing to add value to South Africa's raw material and 'first-stage' processing comparative endowments is critical to the employment generating capabilities of these sectors.

Within this broad context, the metal products and fabrication sector has been the primary driver of job creation within the metals and engineering industry between 1999 and 2002. The metal products and fabrication sector is characterised by a predominantly domestic focus

with the following percentage of companies having 10% or less of their revenue derived from export:

- ❑ 68% of small companies;
- ❑ 72% of medium companies; and
- ❑ 40% of large companies.

Accordingly strategies adopted in this sector would likely have to strengthen domestic demand and companies' abilities to service that demand in order to be able to effectively grow employment. Simultaneously, it is important to recognise, as discussed above, that atypical forms of employment constitute 19.6% of total metal products and fabrication employment and 72% of all jobs created in the sector. Thus a strategy to develop the employment potential of the sector will need to recognise and accommodate the fact that a significant number of jobs created will not be permanent.

Metal products and fabrication has experienced consistent employment growth across almost all firm types. The bulk of the sector (52.3%) is moderately technology intensive and has grown employment most rapidly within the sector.

The Plastic converters sector shares a profile quite similar to that of metal fabrication, with the following percentage of companies having 10% or less of their revenue derived from export:

- ❑ 90% of small companies;
- ❑ 76% of medium sized companies; and
- ❑ 80% of large companies.

In contrast the second most significant sector, both in terms of absolute employment numbers and employment growth, the automotive sector is strongly exported focussed with only 42% of small firms and 34% of medium sized firms not exporting at all.

However employment growth is only one side of the story and with 51% of metals and engineering employment resting in sectors that are experiencing employment decline. It is imperative that a strategy for job creation addresses those declining sectors.

2.2.2 Declining employment

The two sector's in which employment has declined most rapidly between 1999 and 2002, namely electronic equipment and machinery and equipment, have simultaneously experienced high levels of import penetration – in both instances imports account for greater

than 50% of total domestic sales. Importantly, both sectors have also experienced substantial changes in the composition of employment with permanent employment declining even more rapidly and being offset by increases in atypical employment. Thus employment is both declining and becoming more insecure in these sectors suggesting the need for some level of crisis intervention. The significance of the machinery and equipment sector to overall metal and engineering employment, because of its large share of the industry's employment coupled to the risk of rapid employment loss in the short-term, suggests that this should be a priority sector for intervention.

The electrical engineering sector, which also experienced a slight decline (-0.8% CAGR) in employment, derives almost 80% of its sales revenue from the domestic market. However, the decline in employment is recent and indeed official data (see the sector report) shows that employment has been stable over the course of the decade. Furthermore, the sector has successfully maintained domestic market share while growing exports, which bodes well for the job creation potential of the sector.

The final sector experiencing decline – basic metals – has experienced strong export growth as well as extensive recapitalisation, while employment has simultaneously declined by 3% CAGR between 1999 and 2002. Our research indicates that this sector may be at the bottom of its job loss cycle and may be unlikely to shed significantly more jobs over the near future, although there may be increasing insecurity of employment given trends towards atypical employment increasing in both this sector and across the sector more generally. Nevertheless, it is important to note that international trends show that the basic metals sector is characterised by a constant reduction of cost over time (efficiency improvement) to remain competitive on cost curve (commodity type business). In this situation the potential for future employment loss cannot be discounted.

2.2.3 Prioritisation

Prioritisation is no easy task as it *per force* requires and recommends that resources be directed towards some sectors while other sectors (companies and employees) are overlooked or denied access to scarce resources. However, in making these recommendations we have also sought to make more generic proposals that enhance the functioning of the metals and engineering industry. Nevertheless, a strategy for employment creation must necessarily propose the sources of the biggest impact on employment. It is to that we now turn our attention.

Firstly, prioritisation requires some sense of the potential gains and losses that will flow from that prioritisation. The above review has given us some sense of the historical performance of the sectors that constitute the metals and engineering industry. In each instance we have calculated a CAGR that is derived from the survey data. In the below table we apply that

growth rate to the existing employment creation or loss that will follow if this trend is to continue forward for the next year and then for the next five years. However, it is essential to note upfront that a straight-line arithmetic calculation will not provide the insights that we need to prioritise, but a broader set of variables including macro-economic conditions, sales performance, competition and a host of other factors affect the viability of these projections becoming real. These factors are elaborated on in detail in each of the sector reports. We will present a synthesis of the issues as they impact on the policy choices that we are presented with and the nature of the strategy that we recommend.

Table 4. Potential employment growth by sub-sector based on straight-line projections

Sector	Employment consequences, number of jobs gained/lost over the next year	Employment consequences, number of jobs gained / lost over 5 years
Metal products and fabrication	6911	34556
Automotive components	3458	17289
Plastic converters	1503	7517
Electrical engineering	-537	-2687
Electronic engineering ⁵	-1548	-7742
Basic metals	-1966	-9831
Machinery and equipment	-3172	-15860

Table 4 shows, on the basis of a straight-line projection, that metal products and fabrication and automotive components are likely to have the most significant impact on employment creation whilst Machinery and Equipment, Basic Metal and Electronic Engineering will have the most severe declines in employment levels. An employment creation strategy must address both ends of this spectrum.

The identification of Metal Products and Fabrication and Automotive Components as those with the most potential for job creation is consistent with the findings of the qualitative research and other data analysis presented in each of the sectors below. However, there are two caveats to this statement:

⁵ NB: The employment loss trend is likely to be overstated in this sector as 49% of total employment loss in the sector over 1999-2002 was accounted for by significant job losses in one large employer. Accordingly job losses are likely to be more in the order of 4000 over the next 5 years.

1. The sectors analysis and focus groups indicated that employment growth was likely to be even more strengthened in the metal products and fabrication sectors as the result of planned increases in gross domestic fixed investment in general and public infrastructure in particular⁶;
2. The sector analysis indicates the automotive components sector is likely to continue experiencing employment growth on the back of Motor Industry Development Programme (MIDP) driven sales and export growth. However concerns have been raised as to the long-term viability of the sector in the absence of MIDP support. Nevertheless over the short to medium term this sector is likely to be a key driver of employment.

As noted above, employment creation is a product of both encouraging growing sectors as well as attempting to mitigate losses in declining sectors. This point is made starkly in the above table, which shows that on a straight-line basis machinery and equipment is likely to lose as many jobs as automotive components creates over the next 5 years. The research elaborated upon in the sector report shows that, in fact, the deterioration of the sector may in fact accelerate over the short to medium term as many companies in the sector remain reliant on a domestic market, notwithstanding enormous levels of import penetration. In contrast, whilst the straight-line projection shows that basic metals is likely to be a significant job loser over the next 5 year period, indications from the sector analysis are that the large-scale restructuring exercises that have characterised the sector over the past decade have been completed. Accordingly, job loss is likely to slow with even the potential for low levels of employment creation. Consequently, the basic metals sector does not stand out as being of priority importance with respect to protecting or growing employment within its constituent sub-sectors. The role of the sector as a manufacturer of key inputs to downstream sectors, however, entails a different form of importance to the metals and engineering industry as a whole.

It is unfortunate that the two sectors that hold potential for impacting positively on employment creation– electrical and electronic engineering and the plastics conversion – because of their relatively strong manufacturing base; indications that they have successfully restructured to meet international competition and their proficiency in developing advantages based on product and process innovations - be considered outliers in this study.

The electrical and electronics sector report shows that:

- The substantial job losses that have driven the downward trend in the last 3 years are likely to abate as:

⁶ The Growth and Development Summit agreements announced on 7 June 2003 will further strengthen this trend.

- a) Restructuring of the defence industry appears to be largely completed; and
 - b) Employment losses in the telecommunications sectors as well as other sectors that mass produce undifferentiated products are likely to have peaked as many of the companies have now closed or restructured to be more service oriented companies.
- The sector stands to benefit from increased levels of public expenditure on railroads, the continued rollout of low-cost housing and the introduction of the second network operator. These trends may serve to offset the employment losses of the last 3 years.

Accordingly the job loss trends underpinning the straight-line projections in Table 4 are unlikely to continue. However indications are that the sector is unlikely to significantly grow employment in the near future.

Analysis done in the plastics conversion sector shows that the sector has undergone substantial restructuring and recapitalisation in the previous decade resulting in the sector being positively positioned for continued employment growth. The results of the qualitative interviews and the focus groups discussions serve to support the straight-line projection implying that the plastics conversion sector is likely to be a source of employment growth in the short to medium term.

Thus on the basis of the above straight-line projections and the summary of the qualitative trends discussed above (that are presented in detail in each sector report), we believe, that an employment creation strategy for the metals and engineering industry would need to prioritise, in order of importance:

- The metal products and fabrication as both the straight-line projections as well as the broader qualitative analysis indicates that this sector is likely to yield the most employment over the next five years;
- The automotive component sector for identical reasons;
- The machinery and equipment sector as high levels of employment loss are likely to continue in the sector over the medium term and the losses are of such a magnitude that they could well negate a substantial proportion of the jobs created in the other sectors. Furthermore, this sector is potentially of strategic importance to the future of the manufacturing sector as it is an input that could improve the competitiveness and employment creating potential of the sector.

- The plastics conversion sector for the same reasons as the auto components and metal fabrication sectors.
- The basic metals and electronic and electrical engineering sectors despite having experienced employment loss over the last 3 years are likely to experience a 'bottoming-out' of this trend and may perhaps see some employment growth. However, this is unlikely to be significant and accordingly these sectors assume a lower priority within the overall strategy. That said:
 - The sector reports point to a variety of programme and projects that could be implemented that will serve to strengthen the employment creating potential of the sector without requiring substantial and costly interventions. The electrical and electronic engineering sector in particular may benefit from increased expenditure in infrastructure and housing; and
 - The basic metals sector is a potentially a source of substantial competitive advantage for the downstream sectors.

2.3 Conclusion

The above analysis has reviewed employment trends in the metals and engineering industry between 1999 and 2002. In doing so, we have both compared and contrasted the fortunes of the various sectors as well as drawn on the more detailed analysis presented in each of the sector reports. This process has enabled us to propose a prioritisation of the various sectors according to their likely impacts on employment, either because of their potential growth or their decline. Along the way we have alluded to the various dilemmas that face those who would craft a job creation strategy for the metals and engineering industry, including that:

- Those who would focus only on employment creating sectors face the reality that 51% of employment rests in sectors that are losing employment, while those who see rescue plans as the answer face the opposite conundrum namely that fast growing sectors are driving job creation;
- Employment creation is neither the province of exporting sectors nor exclusively of domestic focussed non-tradable sectors, but both;
- While atypical forms of employment are increasingly important to employment growth, permanent employment remains the dominant feature for most of the sector and has been a feature of those sectors that have experienced aggregate growth. Thus both forms of employment and their attendant needs will have to be balanced in the design of a strategy; and

- Finally, the sectors that constitute metals and engineering are unique. Undoubtedly they share common characteristics and challenges; however their employment challenges are simultaneously unique. In the following section we will address the areas of commonality, while each sector report will deal with the unique challenges of and potential responses to the need for employment creation in that sector.

Despite the dualities present in the dilemmas posed in the challenge of employment creation, the challenges are not bipolar. In other words the fact that employment is created both in exporting and domestically focussed companies or that employment created is both atypical and permanent does not necessarily compel us to chose between one or the other, but it means that our strategies must simultaneously address both sets of needs. The failure would be to promote one at the expense of the other, to claim one solution to what is a multi-faceted problem. Our challenge, which we attempt to meet below, has been to develop a strategy that both acknowledges the complexity while simultaneously provides us with sufficient direction for forward movement. It is to articulating that strategy that we now move.

3 AN EMPLOYMENT CREATION STRATEGY

3.1 Introduction

In the following section we review the issues that have been identified by the various sectors as driving or impeding employment creation. In each instance we explore the strategic interventions that can be made to foster employment creation. In doing so we will:

- ❑ Discuss the interventions at a fairly high level of abstraction as to how they pertain to the particular sectors is elaborated upon in each of the following chapters; and
- ❑ Analyse both the drivers/inhibitors and the proposed interventions within the context of the prioritisation framework that we outlined above.

In some instances the same set of solutions may apply to addressing the problem. For example industry collaboration may both improve innovation and give the sectors stronger bargaining power in relation to suppliers. In this section, the proposals will be explained in relation to the driver or the impediment and in the conclusion we will present these proposals in a more thematic manner.

This section draws on three sources of data, all of which are explored in greater depth in the sector reports, namely:

- ❑ Qualitative interviews with industry leaders and stakeholders;
- ❑ The survey results; and
- ❑ Reviews of official macro-economic data, trade statistics and other literature.

As a final comment before delving into the detail of our strategic recommendations, we wish to make the point that the proposals are interdependent and rely on the dynamic generation of new insights and analysis by the sector. We have made a set of recommendations based on data and analysis from a particular period in time. Whilst the trends described above and in the accompanying sector analysis are unlikely to change dramatically over the short-term, a system of monitoring key variables across the sector will be an important component of ensuring the continual modification of the strategies presented below to meet new challenges as they arise.

The strategy, which we articulate in detail below, proposes interventions in 5 key areas:

- ❑ Prioritising employment;

- ❑ The supply side;
- ❑ Manufacturing processes;
- ❑ Demand conditions; and
- ❑ The operating environment.

The starting point for our recommendations is:

- ❑ Firstly, that a substantial proportion of the metals and engineering industry has developed a strong manufacturing base that is capable of servicing both domestic and export market needs. Accordingly, many of our recommendations are aimed at ensuring that this manufacturing base is used to its fullest capacity through increasing demand; and
- ❑ Secondly, that there already exists an array of mechanisms, supply side measures, programmes and projects all of which in one or other way aid the process of employment creation. In this light, our recommendations seek to find ways to harness these programmes behind national objectives for the manufacturing sector. Thus, by way of example, we argue strongly that companies that win export, innovation or, our proposed, employment award should be provided with privileged access to a range of assistance to ensure that what programmes exist serve to strengthen the processes in companies and sectors that we have established lead to employment creation.

Nevertheless, there are areas where more substantial changes or interventions are required – for instance in advancing the capacity to improve process efficiencies within companies – and in those instances we have make specific recommendations.

3.2 Prioritising employment

One of the most striking features of the research was the extent to which interviewees and focus group participants echoed the same sentiment, namely there is no incentive for employment creation. However our analysis has led us to believe that the creation of a single incentive measure is unlikely to have a sustainable impact on meeting the challenge of employment creation. Throughout this chapter as well as the remainder of this report we have detailed the multitude of forces that drive employment trends.

We believe that an employment creation vision is a critical organising framework for the operational environment in which companies operate. In section 3.6 below where we discuss

the operational environment we explore mechanisms in which the vision that is currently articulated in policy could be reinforced in the daily operations of each of the stakeholders.

3.2.1 Presidential awards

Our research revealed a striking lack of awareness about which and what sorts of companies were creating employment. As a corollary to this, there was a lack of clarity as to what could be done to support those companies as well as a sense from companies that were creating employment that there was little done to assist them create more employment. As a consequence we believe that it is critical to find mechanisms to explicitly identify and advance the interests of top employment creating companies. Accordingly, we recommend that a President's Award be established for employment creating champions. The award may have numerous categories, by way of example:

- Most permanent employment created in large, medium and small companies;
- Fastest grower of employment in large, medium and small company.

Such an award would have the effect of creating both an awareness of the potentials of employment creation as well as compelling the dti and other policy makers to continuously seek out and interact with companies that are creating employment. Furthermore, it will supply policy makers with an ongoing supply of information about:

- What drives employment creation; and
- What sectors the most employment creating companies are situated in.

Most importantly however we believe that the Award should result in the winning companies and / or finalists obtaining preferential access for a period of a year to:

- Government and parastatal tenders;
- Supply-side measures; and
- Skills development opportunities.

3.3 Supply side factors

3.3.1 Input costs

The research identified 2 primary cost drivers in the metals and engineering industry:

- Raw materials; and

□ Labour.

The impact of these factors varies from sector to sector depending largely on their unique characteristics. The capital-intensive sectors are more likely to experience raw material costs as impacting on job creation, while the more labour intensive sectors – in which labour is a bigger proportion of the overall cost structure – are obviously more likely to view labour costs as a factor impacting on employment growth. In some instances, the downstream sectors are exposed to a ‘double-whammy’ being both labour intensive and, largely, at the mercy of pricing arrangements determined by dominant upstream producers. For example, 82% of respondents surveyed in the plastics conversion sector said that they experienced ‘major difficulties’ with the costs of input material while simultaneously 25% of respondents felt that wage and salary costs had a significant impact of employment. We now turn to dealing with each of these issues in turn.

Raw materials and import parity pricing

It is practically impossible to do work in South Africa’s metals and engineering industry without hearing the phrase ‘import parity pricing’ (IPP) repeated often and with much passion. The issue has been the subject of extensive research by government in collaboration with industry; it is currently the subject of a case before the Competition Tribunal and is repeatedly debated with much fervour in the public domain.

Intriguingly, the results of the survey indicated that across all companies in the downstream sectors, raw material costs were identified as posing a ‘major difficulty’ in less than 15% of the cases. Yet despite this finding, in the qualitative interviews and focus groups industry respondents consistently identified import parity pricing as a major constraint on their firm’s abilities to grow. This was particularly the case in the ‘metals intensive sectors’ of automotive components, metal fabrication and machinery and equipment. In the heavy and light engineering sector that is comprised by the two leading employment creating sectors – metal fabrication and automotive components – both job champions and job losers⁷ (i.e. those most likely to create employment and those most likely to lose employment) - over one third of the respondent’s surveyed view input costs as impacting on their competitiveness and therefore their ability to create employment.

Addressing IPP is a difficult and complex issue and it is important to note that although the basic metals sector is unlikely to be of direct significance in employment creation in the near future, it nevertheless employs a large number of people and it derives between 40% and 50% of its total sales from the domestic market. Thus, a broad-sweeping intervention may

⁷ See the Methodology chapter for a full description of these terms.

not be the most appropriate as it may jeopardise a significant number of jobs while simultaneously undermining the foreign exchange earnings that are derived from basic metal exports.

Furthermore, given that we have not done any detailed financial or economic modelling around different pricing structures, we are unable to make a definitive recommendation as to the most appropriate pricing structure. Nevertheless, it is clear that downstream participants, particularly in those sectors that we have identified as being most critical to employment creation – metal fabrication, automotive components, plastics conversion and machinery and equipment – consider the issue to have important consequences for their ability to create and retain employment. Accordingly it is imperative that IPP be addressed.

There are two sets of interventions that can be made to address this problem.

Collaboration to reduce input costs

There exists the potential for downstream manufacturers to collaborate in negotiations with their raw material suppliers in order to obtain more favourable pricing in return for the guaranteed purchase of particular products from upstream producers. This is probably the least disruptive approach to addressing the issue of IPP and holds the potential for laying the foundations for downstream manufacturers clustering around the production and distribution of particular products, which in turn hold enormous potential for growing sales. Perhaps the most compelling example of this in the South African scenario is that of that the South African tank container-manufacturing industry, which by 2001 had captured nearly 60% of the international market. This success is based on the level of co-operation that has been displayed by the association, operators, and the manufacturers of tank-containers, as well as the raw material suppliers (Engineering News: 27/02/03).

Launched in 1998, the South African Tank Container Association (SATCA) brought together, in what was a first anywhere in the world, rival investment management companies, manufacturers, the Southern Africa Stainless Steel Development Association and the dti. SATCA have:

- ❑ Put in place the regulatory structure to allow the local industry to secure leadership for South Africa in the global market; and
- ❑ Initiated the reduction of the imported content of tank containers from 65% in 1997 to about 20% in 2002; and introduced standardisation in components and materials, thereby reducing lead times and allowing manufacturers to hold less stock.

Simultaneously principal manufacturers in the tank-container industry met with upstream manufacturers to start a process of co-operation. As a result, upstream manufacturers

increased their share of stainless-steel consumption from 25% in 1997 to 95% in 2002. By co-operating, a domestic world leader industry was created.

Policy interventions

The most obvious intervention that could be made from a policy perspective would be to remove the existing 5% tariff currently enjoyed by the basic metals sector. Given the competitiveness of the large domestic producers such a move is unlikely to significantly affect their current market share, but it would ensure that downstream sectors would be able to access their inputs at slightly lower rates than is currently the case.

Government, if it were to deem that the employment creation benefits from removing IPP would be sufficient to offset the potential macro-economic and employment losses that may follow from a weakening of the basic metals sector, might consider a more interventionist strategy. Such intervention could be targeted at breaking down exclusive distribution arrangements between suppliers and distributors and/or a negotiated charter or agreement on the long term-development of the sector, which would recognise the importance of steel for the competitiveness of local firms and at the same time the vulnerability of suppliers to international price movements.

However if intervention were to happen, government should endeavour to ensure that its interventions are co-ordinated with other initiatives to strengthen the downstream manufacturing sector (see for example proposals around market demand below). Furthermore, government should insist on an agreement with these manufacturers that will translate into employment creation with penalty clauses attached if these agreements are not maintained. We believe that this is necessary to ensure that if the consequence of government intervention on IPP is a weakening of the basic metals sector it will be offset by an overall strengthening of employment creation in the industry and not merely enhancing the profitability of downstream manufacturers.

Scrap metal

The export of scrap metal was consistently identified as a constraint to the employment creating potential of non-ferrous metals converters. Accordingly, we support the recently announced changes to scrap metal policy that attempt to ensure that domestic manufacturers' requirements are met before scrap is exported.

Labour costs and the structure of employment

Employer responses to the survey consistently indicated that the cost of salaries and wages were a constraining factor in creating employment. This was much more pronounced in the machinery and equipment and heavy and light engineering sectors with the majority

employers saying that wage costs had a significant or considerable impact on employment levels. Labour costs have tended to have a higher impact in these sectors as the nature of demand has tended to be more cyclical, thus causing employers to be more sensitive to variable costs such as labour. Indeed the capital-intensive basic metals sector that is also characterised by more regular market demand patterns did not perceive wages and salary costs to have a major impact on employment.

Figure 11: Employers' views on the impact of salary and wages on employment by sector, 2002

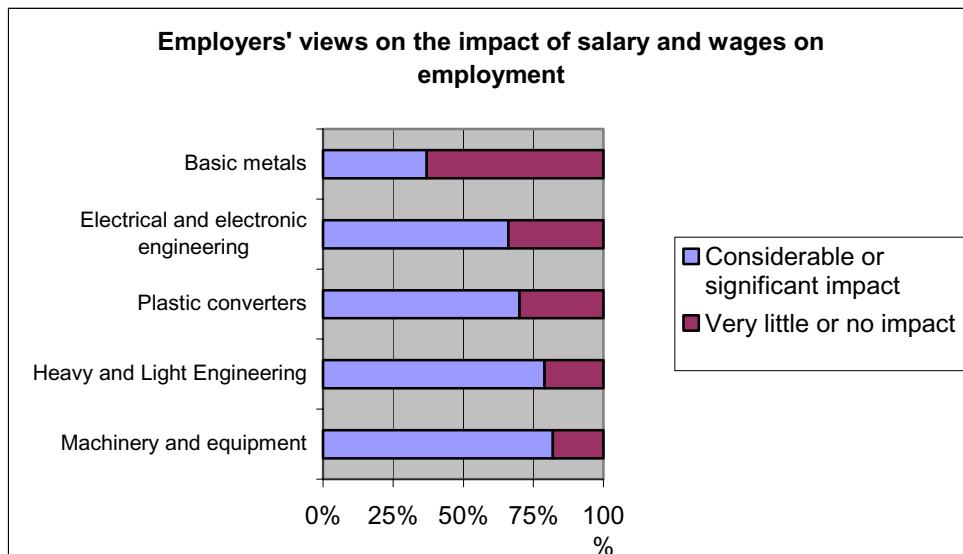


Figure 11 ranks the sectors according to the manner in which employers' perception of the impact of wages and salary costs on employment. The ranking that reflects in this figure is identical to the ranking in Figure 6 above that ranks the sectors in terms of levels of atypical employment. For example, the machinery and equipment sector is both ranked the sector in which employers are most likely to perceived wages and salary costs to have a negative impact on employment and they have the greatest proportion of total employment comprised by atypical labour. Simultaneously, machinery and equipment and heavy and light engineering are priority sectors with respect to employment creation in this sector. This immediately raises a potential dilemma in that if current trends continue unabated:

- ❑ Atypical employment may increase within the priority sectors and therefore in the economy as a whole;
- ❑ Employers' perceptions of the cost of labour and/or the actual cost of labour may have a dampening effect on the employment creating potential of these sectors.

These are sensitive and difficult issues and indeed there is no one answer to this dilemma – indeed during May and June the pages of the *Mail and Guardian* have been host to a debate between 5 equally respected economists, each of whom had a different opinion and presented different interpretations of data to advance their position on whether or not prevailing wage rates negatively impacted on employment or aggregate demand in the South African economy.

However, it is clear that atypical employment is growing in the metals and engineering industry and in those sectors where it is growing most rapidly employers are likely to see wages as an inhibitor to employment creation. Simultaneously, analysis by Dickinson and Roberts (2003) shows that the average income of many workers particularly when seen in the context of supporting large numbers of unemployed dependents is not extravagant by any stretch of the imagination. It is with these two realities in mind that we have attempted to craft the following recommendations.

Managing atypical employment

The current model of outsourcing imposes a third player – the labour broker – between the employer and the employee. Many respondents argued that this model was a necessary response to:

- ❑ New labour legislation that has, in their perceptions, increased the risk of employment; and
- ❑ The need for greater flexibility in the manufacturing process due to the unpredictability of demand.

While acknowledging that the law does grant employers sufficient flexibility to retrench, a fact witnessed by the large-scale retrenchments in manufacturing during the late 1990s, employers simultaneously point to:

- ❑ The negative impacts that retrenchments have on workplace morale and in turn on productivity;
- ❑ The increased administrative burden imposed by new legislation that has added additional operating costs; and
- ❑ What was referred to as the ‘CCMA lottery’ in which employees, even those fairly dismissed or retrenched, are able to tie-up company resources in responding to a CCMA enquiry