

# MINING CONTRIBUTION TO THE NATIONAL ECONOMY

1999-2008



**mineral resources**

Department:  
Mineral Resources  
**REPUBLIC OF SOUTH AFRICA**

**MINING CONTRIBUTION TO THE  
NATIONAL ECONOMY  
1999-2008**

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## **1. INTRODUCTION**

After a century of mining activity, South African (SA) mining industry still continues to make a significant contribution to the economic growth, job opportunities and foreign exchange earnings. While SA holds the world's largest reserves of gold, platinum-group metals and manganese ore, it has however considerable potential for the discovery of other world-class deposits in areas yet to be exhaustively explored. Among the key sectors that contribute to the country's gross domestic product (GDP) and keep the economic engine running are manufacturing, retail, financial services, communications, mining, agriculture and tourism. This report attempts to highlight the importance of mining in terms of its contribution to the country's economy, employment and social upliftment of the people living in and around the mining communities, for a period of 10 years (1999 – 2008).

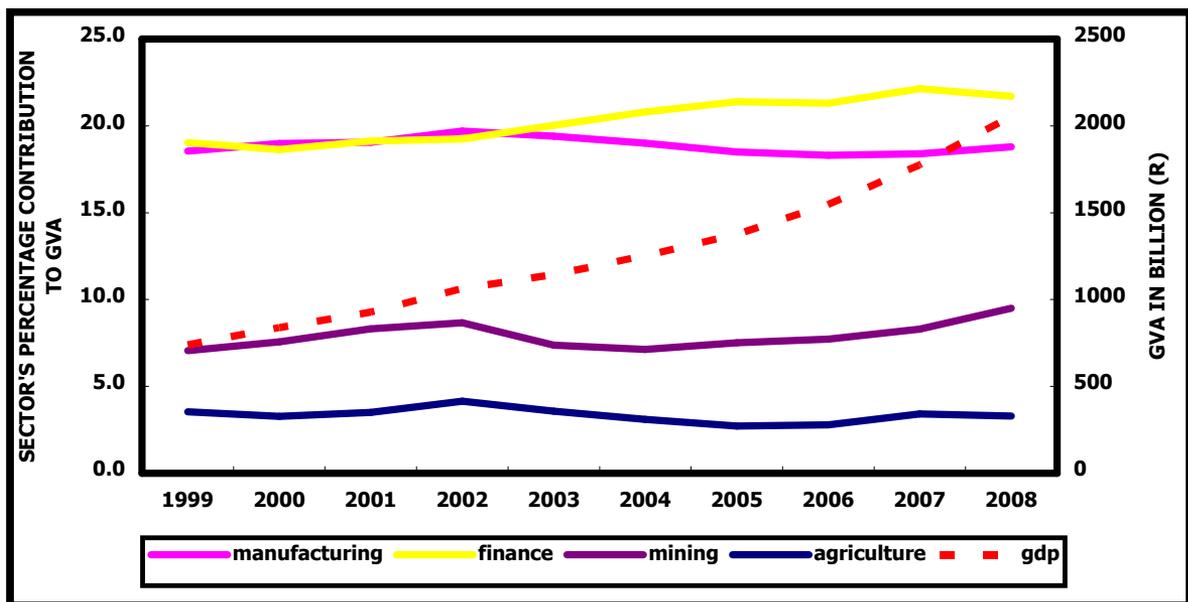
Mining and quarrying, in real rand terms have cumulatively contributed R1031.1 billion from 1999 to 2008. Over the same period the country earned R3 624.0 billion in exports of which R1131.8 billion (31.2 percent) came from mineral exports. The fixed investment in the mining sector increased fourfold from R11.6 billion in 1999 to R47.9 billion in 2008. South Africa offers attractive investment climate which includes among other things, the lowest electricity prices in the world, significantly lower labour costs and a favourable corporate tax of about 28 percent.

The indirect impact of the mining sector has been enormous in terms of funding skills development through education and training, provision of infrastructure for mine, social facilities (e.g healthcare for mine employees and families, houses, school etc.), and the contribution to local economic development. In a drive to develop a more financially balanced and inclusive nation, mining has led private sector initiatives on transformation, skills development and black economic empowerment (BEE).

## 2. CONTRIBUTION OF DIFFERENT ECONOMIC SECTORS TO GROSS VALUE ADDED (GVA), 1999 TO 2008

The potential of the SA's economy is evident in the diverse sectors and industries that exist in the country and the equitable significant contribution thereof to the national GDP (Fig 1). The performance of major sectors that contribute to the national economy are reflected in figure 1. In the period under review finance and manufacturing were the major contributors to GDP with an average of 20.4 percent and 18.9 percent respectively, followed by mining and agriculture at 7.9 and 3.3 percent during the same period.

FIGURE 1: CONTRIBUTION OF DIFFERENT ECONOMIC SECTORS TO GVA, 1999 - 2008



Source: SA Reserve Bank, Quarterly Bulletin March 2009

TABLE 1: PERCENTAGE CONTRIBUTION TO GROSS VALUE ADDED (GVA) BY SECTOR  
1999 – 2008

<b>Year</b>	<b>GVA (R' Million)</b>	<b>Manufacturing</b>	<b>Finance</b>	<b>Mining</b>	<b>Agriculture</b>
<b>1999</b>	738.9	18.5	19.0	7.1	3.5
<b>2000</b>	838.2	19.0	18.6	7.6	3.3
<b>2001</b>	928.2	19.1	19.1	8.3	3.5
<b>2002</b>	1063.8	19.7	19.2	8.7	4.2
<b>2003</b>	1143.7	19.4	20.0	7.4	3.6
<b>2004</b>	1251.0	19.0	20.8	7.1	3.1
<b>2005</b>	1375.0	18.5	21.4	7.5	2.7
<b>2006</b>	1548.8	18.3	21.3	7.7	2.8
<b>2007</b>	1775.0	18.4	22.1	8.3	3.4
<b>2008</b>	2053.5	18.8	21.7	9.5	3.3
<b>Annual average</b>		<b>18.9</b>	<b>20.3</b>	<b>7.9</b>	<b>3.3</b>

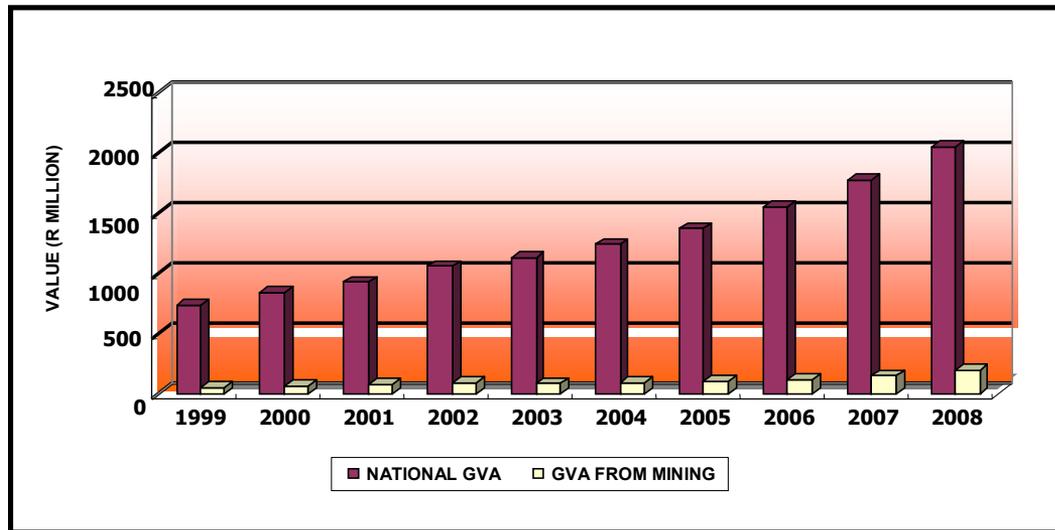
Source: SA Reserve Bank, Quarterly Bulletin March 2009

### **3. THE CONTRIBUTION OF MINING TO GROSS DOMESTIC PRODUCT (GDP)**

The growth in the real value added by mining industry was strengthened by the increased demand for metals, particularly from China, which resulted in high commodity prices. The mining industry's contribution to Gross Domestic Product (GDP) increased by R143.9 billion from R52.2 billion in 1999 to R196.1 billion in 2008, an average annual increase of 7.9 percent to GDP (Fig 2).

The growth in the gross value added (gva) by mining in rand terms can be attributed to factors such as the effects of the rand/dollar exchange rate, introduction of the Minerals Petroleum Resources Development Act of 2002 (MPRDA) which led to an increase in newly opened mines, improved commodity prices and increased production of most commodities.

FIGURE 2: CONTRIBUTION OF MINING TO GROSS DOMESTIC PRODUCT, 1999 – 2008



Source: SA Reserve Bank, Quarterly Bulletin March 2009

PGMs remained the major percentage contributors to the national economy, expressed as a ratio of total sales to Gross Value Added (GVA), the contribution increased annually by an average of 3.1 percent from 1999 to 2008 (Table2). The increase was due to the PGMs growing demand from car manufacturing (automotive) and jewellery industries, which influenced the increased contribution of the sector to the country's national economy. The gold sector's percentage contribution was 2.9, followed by processed minerals and coal at 2.7 percent and 2.5 percent respectively over the same period (Table 2).

TABLE 2: RATIO OF ANNUAL TOTAL SALES TO GROSS VALUE ADDED (GVA), 1999 – 2008

Year	PGM	Gold	Coal	Ferrous	Non Ferrous	Industrial Minerals	Processed Minerals
1999	2.0	3.4	2.4	0.6	0.4	0.6	2.5
2000	3.2	3.0	2.4	0.6	0.6	0.5	2.7
2001	3.6	3.1	2.8	0.7	0.5	0.5	2.6
2002	3.3	3.9	2.9	0.7	0.5	0.5	2.9
2003	2.5	2.9	2.4	0.6	0.4	0.5	2.5
2004	2.7	2.4	2.3	0.7	0.5	0.5	2.9
2005	2.8	1.8	2.6	0.8	0.5	0.5	2.9
2006	4.3	2.4	2.5	0.9	0.9	0.4	2.8
2007	3.1	2.9	2.5	0.7	0.6	0.5	2.7
2008	3.3	2.7	2.6	0.9	0.6	0.5	2.9
AVR	<b>3.1</b>	<b>2.9</b>	<b>2.5</b>	<b>0.7</b>	<b>0.6</b>	<b>0.5</b>	<b>2.7</b>

Source: DMR: Mineral Economics Directorate

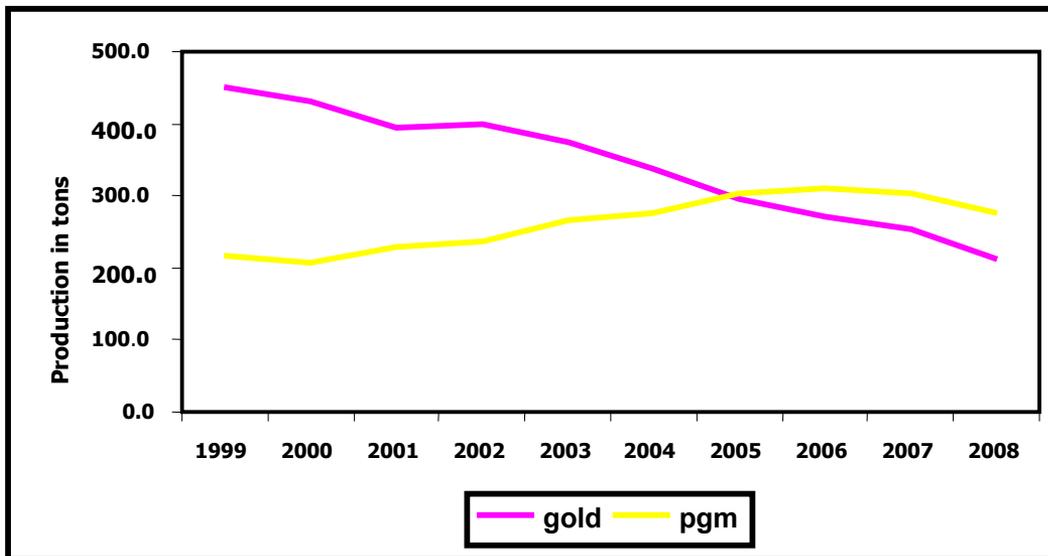
Source: SA Reserve Bank, Quaterly Bulletin December 2009

#### 4. SA'S MINING SECTOR PRODUCTION

For the past decade production of most commodities has steadily increased with the exception of gold and non ferrous minerals. The gold industry continued on its declining trend due to the constant output decline, brought about by the difficulties associated with deep level mining and lower grade ores which led the country to remain as the world's third largest gold producing country after China and the United State of America (USA).

However, in 2008 production of PGM's amounted to 276t, 27 percent higher than the 217t produced in 1999. Despite the 9.2 percent output decrease from 161.0t in 2007 to 146t in 2008, SA continued to be by far the world's largest platinum producer followed by Russia with 25.5t in 2008 (Fig 3).

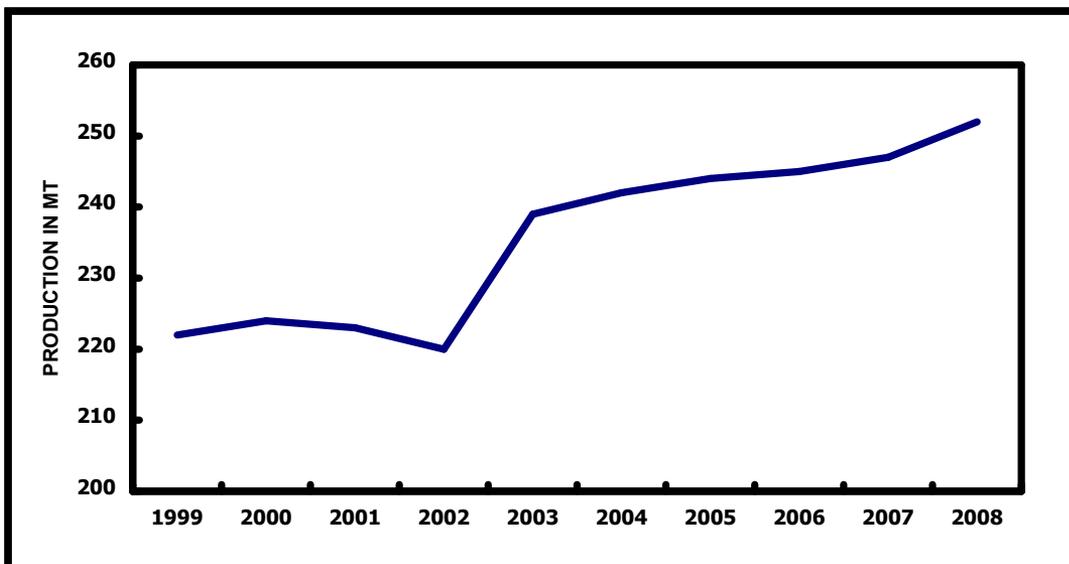
FIGURE 3: SA'S ANNUAL GOLD AND PGM MINING PRODUCTION, 1999-2008



Source: DMR: Mineral Economics Directorate

Coal is one of the commodities of strategic importance to South Africa and will remain so until alternative sources of energy are introduced.

FIGURE 4: SA'S ANNUAL COAL MINING PRODUCTION, 1999-2008



DMR: Mineral Economics Directorate

Between 1999 and 2008, the nonferrous mineral production decrease annually averaged 5 percent mainly due to declining global demand. The most affected commodities were copper, cobalt and nickel which declined by 17 percent, 16 and 14 percent respectively.

## **5. EMPLOYMENT IN THE SOUTH AFRICA'S MINING SECTOR**

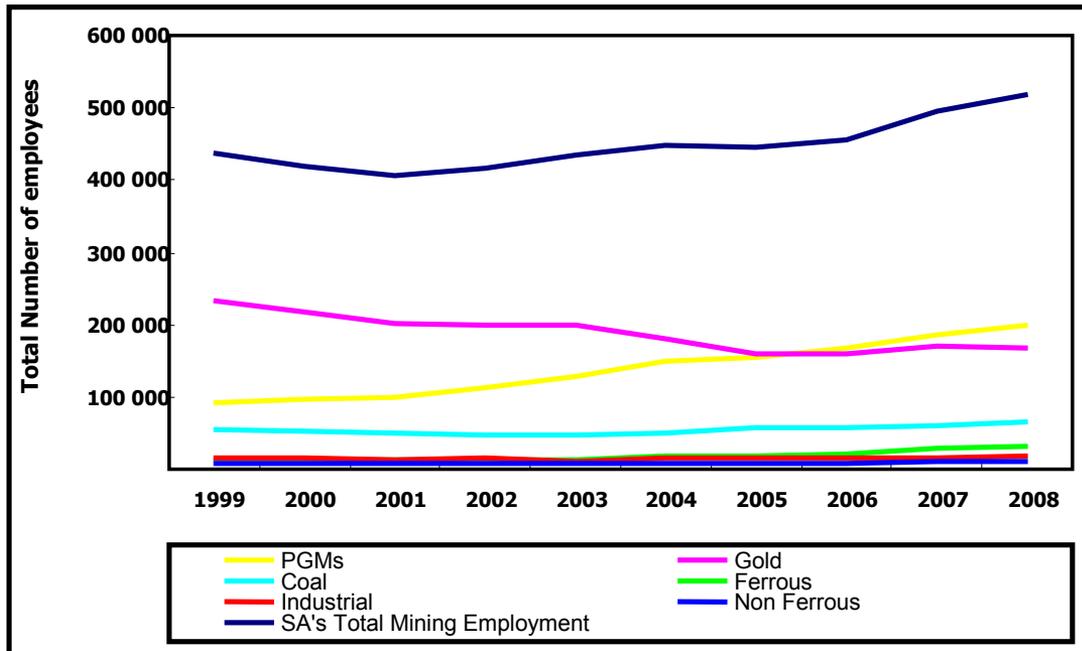
Employment in the mining sector over the last ten years increased by 18.6 percent from 437 472 in 1999 to 518 519 in 2008. Over the last ten years, a total of 81 047 jobs were created as a result of expansion projects recorded in the mining industry encouraged by the provisions of the Minerals and Petroleum Resources Development Act (MPRDA) of 2002. In 2008, there were 1 515 operating mines and quarries, of which 52 mines produced gold, 35 produced platinum-group minerals, 100 produced coal and 394 produced diamonds as their main commodity.

However, the impact of the world economic meltdown became evident in the last quarter of 2008, as the demand for commodities started to decline putting a strain on profitability. As demand plummeted, the mines were forced to cut down on production and suspended expansion and other projects and ultimately job reduction started threatening most marginal operations.

Looking at the employment levels by sector, the gold industry continues on its declining trends shedding 67 785 jobs from 234 206 in 1999 to 166 421 in 2008. PGMs industry continues to be the largest employer, since it surpassed gold for the first time in 2006, employing 199 948 in 2008 compared with 91 269 in 1999. (Fig. 5).

Employment in the coal sector increased by 18.1 percent to 65 412 in 2008 from 55 378 in 1999, despite the high level of mechanization in the coal sector (Fig. 5). In the ferrous minerals sector, employment more than doubled to 29 469 employees in 2008 from 13 411 in 1999, with iron ore being the largest employer. The industrial minerals sector which increased by 16,2 percent during the period under review, accounted for 5 percent of the total mining employment figure in 2008 (Fig. 5).

FIGURE 5: SA'S ANNUAL MINING EMPLOYMENT BY SECTOR, 1999-2008



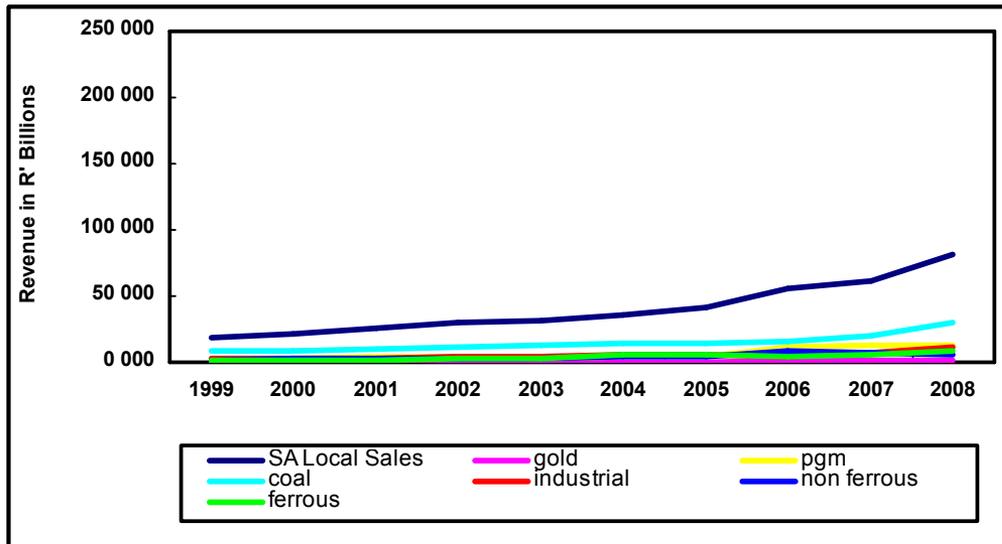
Source: DMR: Mineral Economics Directorate

## 6. LOCAL SALES REVENUE

The coal sector which was hardly affected by the global economic crisis and has continued to be the major local income earner for past ten years followed by PGMs, as indicated in Figure 6. This is evident in its performance of local sales revenue which increased significantly from R8, 308 billion from 1999 to R30, 120 billion in 2008.

The industrial minerals local sales also increased from R2.9 billion in 1999 to R11.8 billion in 2008 owing to the increasing demand and consumption from the SA's construction sector which has been steadily growing over the past ten years. The construction of football stadia and upgrading of road, rail and other infrastructure pushed the demand for most industrial minerals higher.

FIGURE 6: SA ANNUAL MINING LOCAL SALES BY SECTOR, 1999-2008



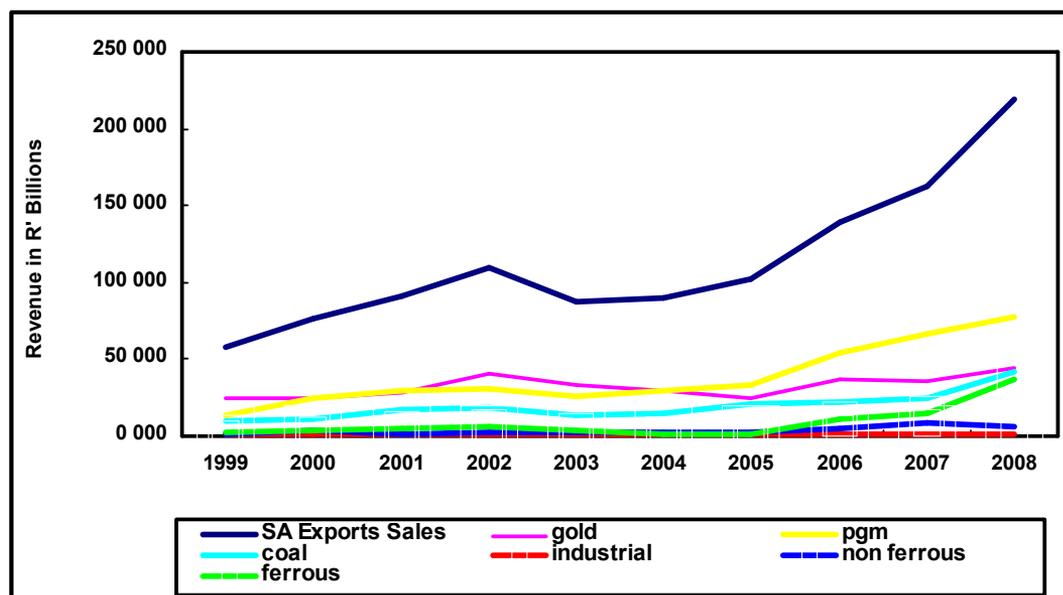
Source: DMR: Mineral Economics Directorate

## 7. EXPORTS SALES REVENUE

During the period under study, the country has earned R3 624.0 billion in exports with R1 134.3 billion (31.3 percent) from mineral exports. The major export revenue earners were platinum-group metals, followed by gold and coal (Fig 7).

Export sales revenue of primary ferrous minerals increased from R2.6 billion in 1999 to R37.1 billion in 2008. The increased contributions of primary ferrous minerals in 2008 can be attributed to the increasing demand and importance of the sector in the local and international minerals and mining industry. Exports sales revenue of industrial minerals increased by 20.3 percent to R1.7 billion over the same period (Fig. 7). Approximately 60 percent of South Africa's primary industrial mineral exports, by value, were destined for Europe, with 25 percent sold to the Pacific Rim countries.

FIGURE 7: SA' ANNUAL MINING EXPORT SALES BY SECTOR, 1999-2008

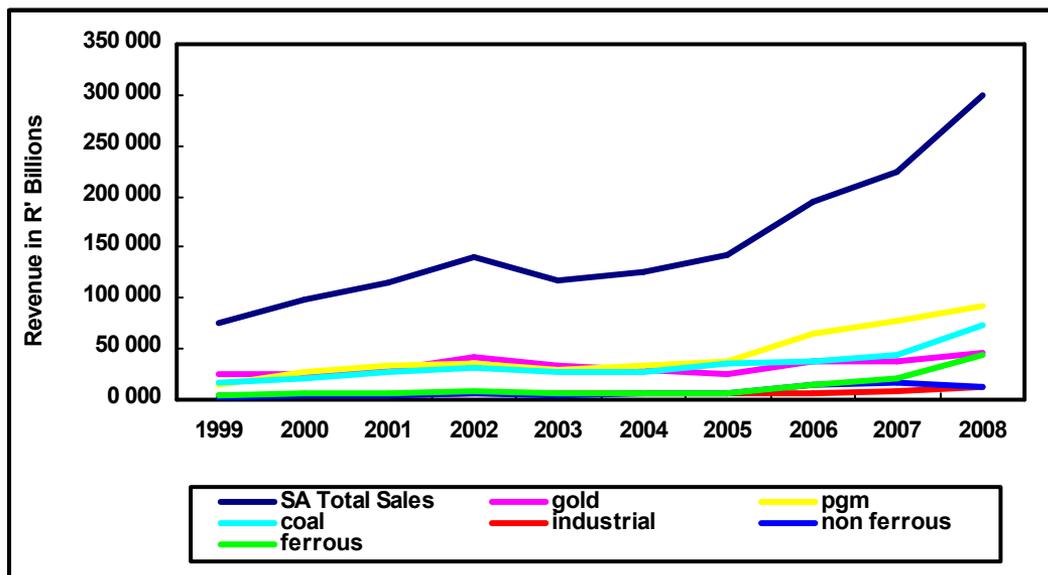


Source: DMR: Mineral Economics Directorate

## 8. TOTAL SALES REVENUE

South Africa's total sales revenue in rand terms shows a significant increase, despite the reduction in production of precious commodities in 2008. The increase in total sales revenue can be attributed to the high prices of most commodities before the economic crisis crept in, particularly gold and platinum and the weakening of the rand against the US dollar in 2008. Total coal sales revenue steadily increased to R72.5 billion in 2008 from R17.7 billion in 1999, as result of higher prices driven by increasing electricity demand and generation as well as growing demand from major importing countries. South Africa's total primary mineral sales revenue increased by 293.8 percent from R76.3 billion in 1999 to R300.3 billion in 2008 (Fig 8).

FIGURE 8: SA' ANNUAL MINING TOTAL SALES REVENUE BY SECTOR, 1999-2008



Source: DMR: Mineral Economics Directorate

## **9. CONCLUSION**

Despite the pressure that the mining industry was under due to the global financial crisis and the impact of the electricity challenges in the country, it however continued to make an important contribution to the national economy and provided the impetus for the extensive infrastructure development and sustenance of the country's secondary industries. South Africa's mining industry is continually expanding and adapting to changing local and international world conditions, and remains a cornerstone of the economy, making a significant contribution to economic activity, job creation and foreign exchange earnings. The mining sector has played, and continues to play a critical role as a foundation industry, which helps the development of other industries (especially the side-stream input industries).

In terms of contribution to the national economy, the mining industry contributed 8.0 per cent to Gross Value Added (GVA), for the past ten years. The main contributors were platinum and gold accounting for an average of 3.1 percent and 2.9 percent respectively expressed as a ratio of total sales to GVA over the past ten years. This contribution can increase significantly through increased participation in the downstream or beneficiation activities. Also, the contribution of mining to side-stream beneficiation is meaningful and has contributed significantly to the industrialised economy of the country. The support and facilitation of downstream and side-stream beneficiation will create more value in the economy, to help grow exports and investment for the benefit of all.

The industry continues to be one of South Africa's major employers, employing more than 500 000 employees in 2008. Nearly 73 percent of the total minerals sales revenue in 2008 came from primary exports, underpinning once again the extent of opportunities still available in the beneficiation sector. Lucrative opportunities exist for downstream processing and value adding of iron, carbon steel, stainless steel, aluminium, platinum group metals and gold. Hence the South African government with the leadership of the Department of Mineral Resources (DMR) has embarked on a strategy of promoting value addition or beneficiation of raw minerals and reducing the export of raw mineral products.

There is a need to invest in new exploration technologies to unlock the investment potential as the available geological information indicates that South Africa remains largely under-explored.

It is against this background that the government and the mining industry should jointly commit to and strengthen the mining strategies and policies for the industry and the country to become more competitive and remain an important player in the global mining industry.

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