

## Sector focus - Mining

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### 1 Price surge for metals & minerals

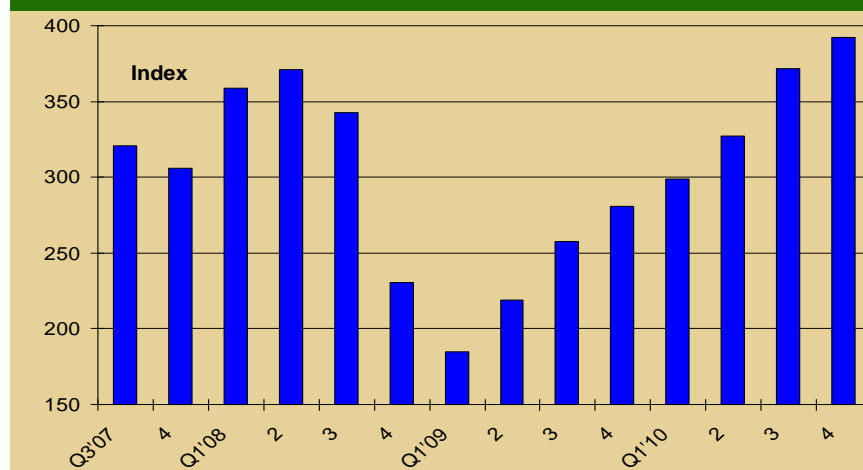
Following a lengthy period of volatility and declining levels of output (in real terms), South Africa's mining sector seems destined for a return to a strong growth path.

The most obvious reason for optimism over the future prospects for both the local and global mining industry is the swift and healthy recovery of commodity prices. Table 1 illustrates the remarkable reversal of fortunes for the prices of a virtually all the World Bank commodity price indices for developing countries, with the indices for metals & minerals and base metals amongst the three top performers. Figure 1 clearly illustrates the brevity of the commodity crash of 2008, with the metals & minerals commodity price index surpassing its high of mid-2008 during the third quarter of 2010.

Table 1: % Change in selected commodity price indices - 2009 (average) to Dec 2010	
	%
Raw Materials	72.7
Metals and Minerals	71.4
Base Metals	68.0
Fats and Oils	44.7
Energy	43.4
Agriculture	40.7
Food	33.2
Grains	26.5
Beverages	26.1
Fertilizers	16.0
Timber	10.2

**Source:** World Bank

Fig 1: Recovery of World Bank commodity price index for metals & minerals (2000 = 100)



Precious metals in particular fared exceptionally well over the past 18 months. A combination of a weaker dollar, uncertainty over the depth of the US economic recovery, growing fears over higher inflation in 2011 and strong growth in both industrial & investment demand from South-East Asia lifted the gold price to a new all-time high at the end of 2010.

Spot gold, which had hit several record highs during the second half of 2010, rose to a new record of \$1,421 an ounce on 9 November 2010, whilst gold futures have also jumped to new peaks. The average trading price during January 2011 was marginally lower at \$1,358 an ounce.

The traditional inverse correlation between the gold price and the value of the US dollar has been quite prevalent during most of 2010, but a concomitant appreciating domestic currency has prevented South Africa from reaping the full benefit of the new boom in precious metals.

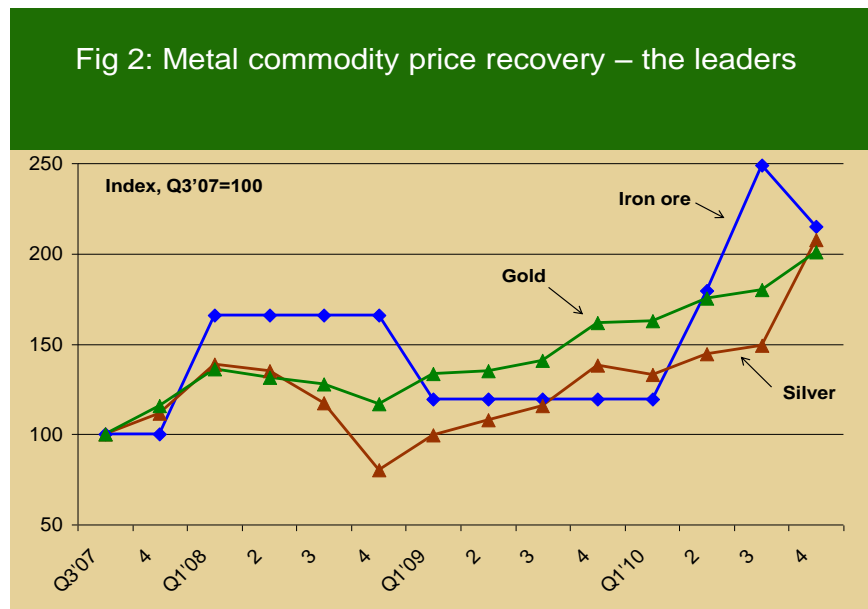


Figure 2 illustrates gains of 100% and more for the three top-performing metal commodity prices tracked by the World Bank's index range for developing countries (between the 3<sup>rd</sup> quarter of 2007 and the end of last year).

Figure 3 illustrates the sound performance of the second best group, whilst figure 4 confirms the fact that not all metal commodities have recovered fully from the twin effects of the recession and over-supply.

Continuing uncertainty over the soundness of capital markets in the US and Europe was succinctly referred to by the head of the US Federal Reserve as constituting "unusual uncertainty" in global markets, a remark that has also buoyed the gold price.

Platinum and silver have shared in the recent precious metals price surge (the strong performance of silver is included in figure 2).

Fig 3: Metal commodity price recovery – 2<sup>nd</sup> best performers

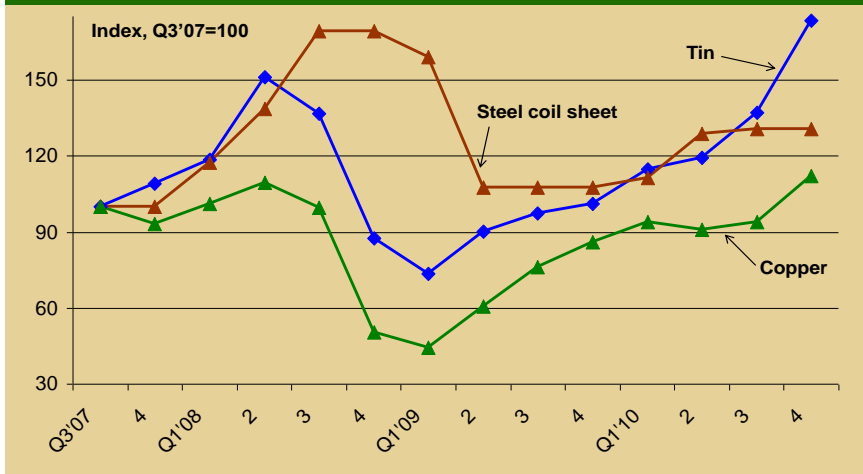
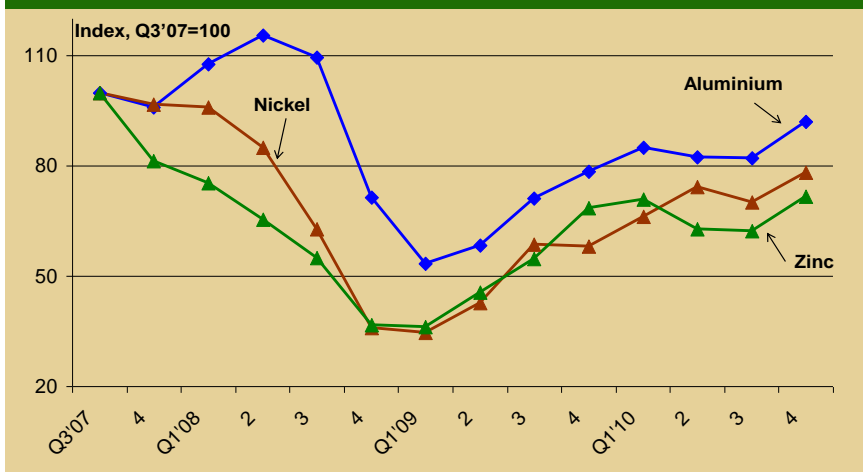


Fig 4: Metal commodity prices – the laggards



## 2 Resurgence of the global economy

The main reason for the remarkably swift and strong recovery of most mineral commodity prices is related to the fact that the recent global recession only lasted, on average, three quarters, with several key developing countries actually having avoided the recession altogether (including China and India).

After the contraction in 2009, the World Bank estimates global GDP to have increased by 3.9 percent in 2010. The bank expects growth in both high-income and developing countries to slow marginally in 2011, before improving again from mid-year onwards, settling at rates close to their longer-run potential.

According to the latest global economic outlook by the World Bank, published early in 2011, low and middle-income countries contributed almost half of global growth (46 percent) in 2010. Significantly, all of the developing country growth recorded in 2010 was due to increased domestic demand.

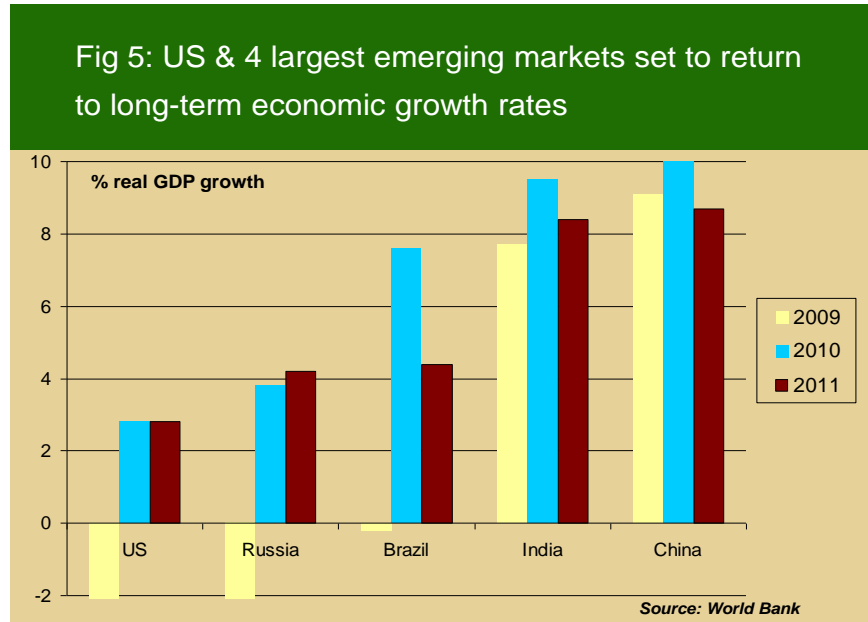
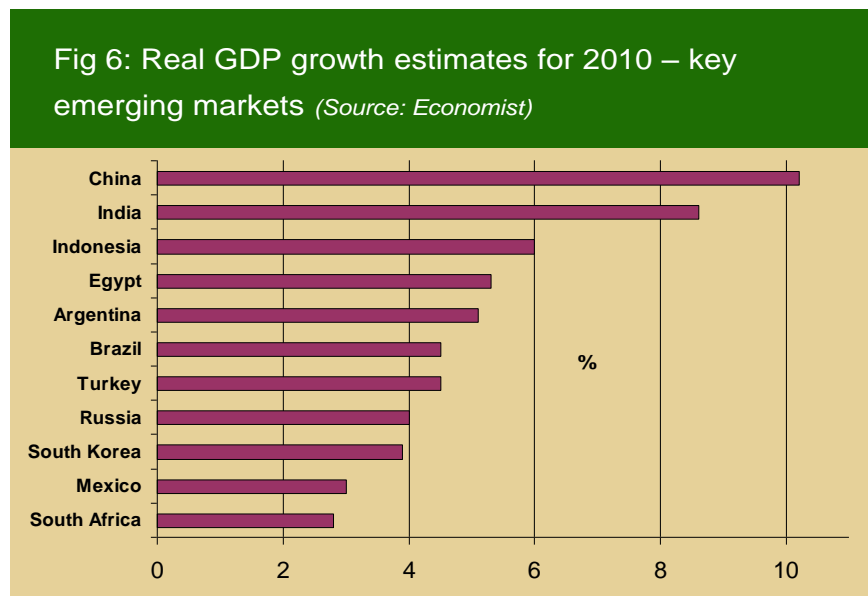


Figure 5 illustrates the soundness of the economic recovery in the US and the four largest emerging markets, whilst figure 6 illustrates the anticipated return to robust growth (roughly in line with the long-term potential) in most of the key developing countries.



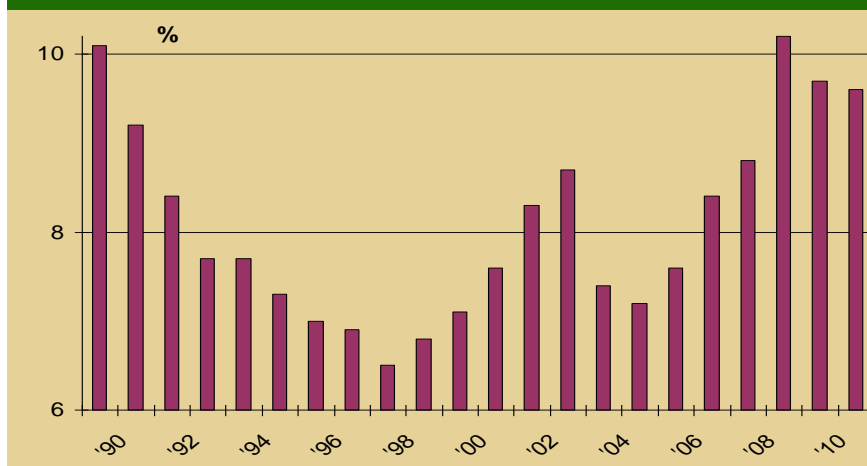
### 3 Recovery of value added by mining in South Africa

In South Africa, uncertainty surrounding an onerous & unpredictable new regulatory environment, a high propensity for labour unrest, unreliable electricity supply and the 2009 commodity crash combined to place severe pressure on mining activity during the first decade after democracy.

Between 2003 and 2009, South Africa's GDP increased by more than 25% in real terms, with the sector for financial & business services weighing in with a hugely impressive 46% increase in real value added. In sharp contrast, mining output declined by more than 10% over this period (in real terms). Fortunately, however, the commodity boom and high prices that occurred prior to the 2009 recession more than compensated for the lethargy in physical output.

Higher prices for metals and minerals resulted in the mining sector's contribution to the country's GDP increasing steadily from a low of just above 7% in 1997 to more than 10% (in 2008) before declining again marginally in 2009 and 2010. The volatility in the mining sector's contribution to the economy is aptly illustrated by figure 7.

Fig 7: Gross value added by the mining sector as % of total GDP (South Africa)



South Africa's metals & minerals industry is supported by an extensive resource base comprising an exceptionally large variety of mineral commodities. Although the country's mining industry is best known for its substantial reserves of diamonds, gold and platinum, the mining industry started rather unobtrusively with copper mining in the Northern Cape roughly 150 years ago.

Mining activity accelerated rapidly after the discovery of diamonds in 1867 and gold in 1886. The industry received a further structural boost with the establishment of the erstwhile Transvaal coalfields and the discovery of significant deposits of other minerals, including chromium, platinum, manganese and uranium.

By the mid-1980s, the records of the South African Department of Mineral & Energy Affairs showed that more than 1,000 mines & quarries in the country were producing 60 different minerals, which were being exported to more than 80 countries around the globe.

The country's extraordinary wealth of metal & mineral resources has managed to sustain significant levels of foreign direct investment spanning more than a century, whilst global fund managers invariably include equities of listed South African resource sector

companies in their portfolio investments. Table 2 depicts the unique role that South Africa plays in the world's metals & minerals industry.

<b>Commodity</b>	<b>Production</b>	<b>Unit</b>	<b>% of world share</b>	<b>Ranking</b>
Platinum	276	t	57.9	1
Alumino-silicates	220	kt	55	1
Ferrochromium	3,269	kt	52	1
Chrome	9,683	kt	47	1
Vermiculite	200	kt	39	1
Vanadium	20.3	kt	35.4	1
Zirconium	405	kt	29.8	2
Titanium	1,211	kt	19.4	2
Manganese	5,589	kt	14.2	2
Ferromanganese	704	kt	11	3
Gold	213	t	8.8	3
Antimony	3,370	t	2.1	3
Fluorspar	299	kt	6	4
Diamonds	12.9	Mct	7.9	6
Coal	250.4	Mt	4.2	6
Iron ore	41.3	Mt	2.5	7
Silicon metal	51.7	kt	3.2	8

From an economic perspective, three significant eras can be identified in the economic performance of South Africa's mining sector over the past four decades.

- *The golden era*

Between 1969 and 1980 mining experienced sustained and strong growth, mainly as a result of fairly dramatic increases in the prices of gold and other precious metals. Over this period, the contribution of mining to the country's GDP increased by more than 175% to a level of more than 20%.

- *Structural decline*

This was followed by a seventeen-year period characterised by socio-political uncertainty and commodity price volatility, including several instances of declining price trends, during which the mining sector's contribution to GDP declined by 68% to an historic low of less than 7% (in 1997).

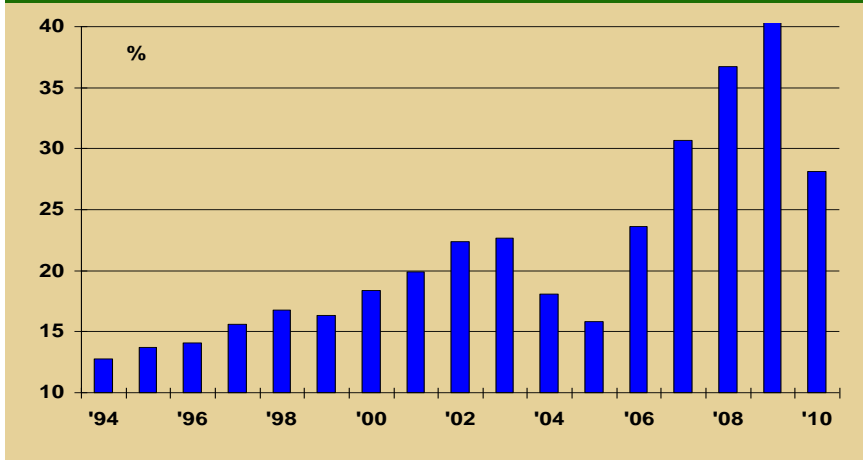
- *Price-led recovery*

The third era commenced in 1997, but was rather subdued during the initial years of democratic rule, mainly due to uncertainty over the new South African government's policy stance towards mining rights. Rapid economic growth in the world's emerging markets, particularly China and other countries in South-East Asia, eventually caused demand to outpace supply, which resulted in the commodity boom of 2005 to 2008. Predictably, South Africa's mining sector received a welcome boost from escalating

metal & mineral prices, despite lingering uncertainty over the possibility of nationalisation of the country's mines and weak output levels. In 2008, mining's contribution to GDP surpassed the 10%-level for the first time in two decades.

The trend depicted by figure 8 suggests that investors are becoming less concerned over political interference and over-regulation in the South African mining sector, with significantly more of the sector's output having been channelled to investment in new productive capacity in recent years.

**Fig 8: Capital formation/Gross Value Added ratio in mining (South Africa)**



#### **4 Taxation as alternative to nationalisation**

Mining has featured prominently in the South African financial media over the past two years as a result of repeated calls for policies of nationalisation by members of the ANC Youth League and leaders of the SA Communist Party.

The events in Australia during 2010 surrounding the introduction of an alternative to nationalisation, namely a so-called “super tax” on mining profits, provides an interesting case study that may be considered by the SA government in future.

Although the initial mining tax proposal abruptly ended the political career of Kevin Rudd, Australia's previous prime minister, his replacement (Julia Gillard) introduced a practical amendment that has been able to withstand the powers and economic realities inherent in the institutionalised system that combines a predominantly market-orientated economy with democracy.

Mr Rudd's fate was already sealed in the beginning of last year after his government had proposed a new super tax of 40% on resource profits, aimed mainly at mining companies. Initially, the tax was designed to kick in when the return on a mining project reached the level of the long-term bond yield.

Opposition from mining companies, their employees & shareholders and the public at large was vehement enough to force the ruling party in Australia to prematurely end Mr Rudd's tenure as the head of state.

His successor, Julia Gillard, immediately lowered the rate to 30% and it is now proposed to become effective only when returns exceed a level of seven percentage points above the ruling long-term bond yield.

The backdrop to these amendments include coordinated opposition from the three mining giants (BHP Billiton, Rio Tinto and Xstrata), including a virtual halt of any new capital formation, which involved job losses at a time when the economy was struggling to recover from the effects of the recent global recession.

Hopefully, the South African government will take cognisance of the variety of negative direct and indirect economic effects that invariably result from undue and excessive regulation of markets. These effects begin with negative investor sentiment and eventually trickle down to lower foreign exchange earnings, increased unemployment, lower output levels and an erosion of the tax base.

## **5 South Africa ranked no 1**

South Africa's position as the world's richest country in terms of its mineral reserves was recently confirmed by Citigroup. A report on the global mining industry conducted by this major US banking group, which was released during the second quarter of 2010, ranks South Africa as number one, with reserves valued at \$2.5 trillion. Russia is ranked second, followed by Australia.

Although the abundance of precious metals, especially platinum group metals, constitutes the overwhelming share of South Africa's total mineral reserves, a key advantage is that most South African mines have average life spans of more than 100 years at current rates of exploitation.

In contrast, Chinese mines have an average 17-year life span (according to the US Geological Survey system). It is not surprising therefore, that China continues to invest heavily in the mining sectors of developing countries, especially in Africa.

## **6 Financial soundness & continued capital investment (globally)**

Positive sentiments towards the prospects for mining are also echoed in a recent annual review of global trends in the mining industry by PricewaterhouseCoopers (aptly titled "*Mine*"). Reporting on events during the recession of 2009, the review accurately concludes that it was a year of two halves. The first half witnessed sharp declines in most metal and mineral commodity prices and extremely tough business conditions due to the global recession.

Most mining companies responded swiftly and decisively to these conditions, however, mainly via the restructuring of funding and curtailing or temporary mothballing of marginal mining operations. Combined with prudent business strategies and the welcome recovery of commodity prices, the year ended with the market capitalisation of the top-40 global mining companies returning to the heights of 2007.

Of particular significance was the fact that not a single company in the top-40 was threatened by bankruptcy during the recent recession.

Further proof of the inherent stability of the global mining industry is provided by the fact that, despite a decrease in cash flow from operations in 2009, the top-40 companies spent \$74 billion on the expansion of production capacity.

South Africa has been at the forefront of capital formation in mining, as illustrated earlier (by figure 8). Although lingering uncertainty still exists over the threat of nationalisation, the fundamental economic environment for a mining sector boom has seldom looked more promising.

## **7 Higher profitability forecast for metals & mining**

During the second half of 2010, Citigroup completed a global analysis of the economic value added (EVA) by selected companies in the metals, mining & steel sectors.

The ensuing report provided rankings of companies, regions and commodities in terms of generating the most shareholder value in the five years between 2005 and 2009 as well as a forecast of those that are likely to generate the most attractive return over the next three years (2010 to 2012).

Key conclusions reached in the report include the following:

- Mining industry profitability has improved, with global mining companies averaging a 5% return above the cost of capital during the five-year review period. The forecast is for this rate to improve to 9% per annum over the next three years.
- The steel sector has not performed as well as mining, with an EVA of 2.4%, which is expected to decline to 0.3% between 2010 and 2012. BHP Billiton was the top performer in absolute EVA terms and is expected to generate \$47bn over the next three years. .
- Coking coal was the commodity with the highest rate of return over the past five years, followed by copper and iron ore. These three commodities are expected to continue outperforming most other mining commodities over the next three years, whilst a significant improvement in the performance of gold is being forecast. Platinum group metals, steel and zinc are expected to meet their cost of capital.
- Emerging markets are expected to outperform developed markets between 2010 and 2012, particularly in Latin America and Australia.

Table 3 depicts the most favoured companies covered by the Citigroup research. The rankings are based on a combination of commodity exposure and EVA return. Several of the potential laggards identified by Citibank include companies in the aluminium sector.

<b>Table 3: Citibank's top-18 ranked metals, mining &amp; steel companies (2005 to 2009)</b>	
Grupo Mexico	Raspadskaya
Antofagasta	Xstrata
PanAust Limited	BHP Billiton
OZ Minerals	Rio Tinto
Freeport-McMoRan	JFE Holdings
Cliffs Natural Resources	Gerdau SA
Fortescue Metals Group	Salzgitter
Bumi Resources	POSCO
China Coal Energy	Mechela n d Voestalpine

## 8 Rationale for the new “BRICS” grouping

Afro-pessimists were caught unawares by the decision of the former “BRIC” grouping (Brazil, Russia, India & China) to invite South Africa to join an enlarged group representing the five most influential emerging markets in the world.

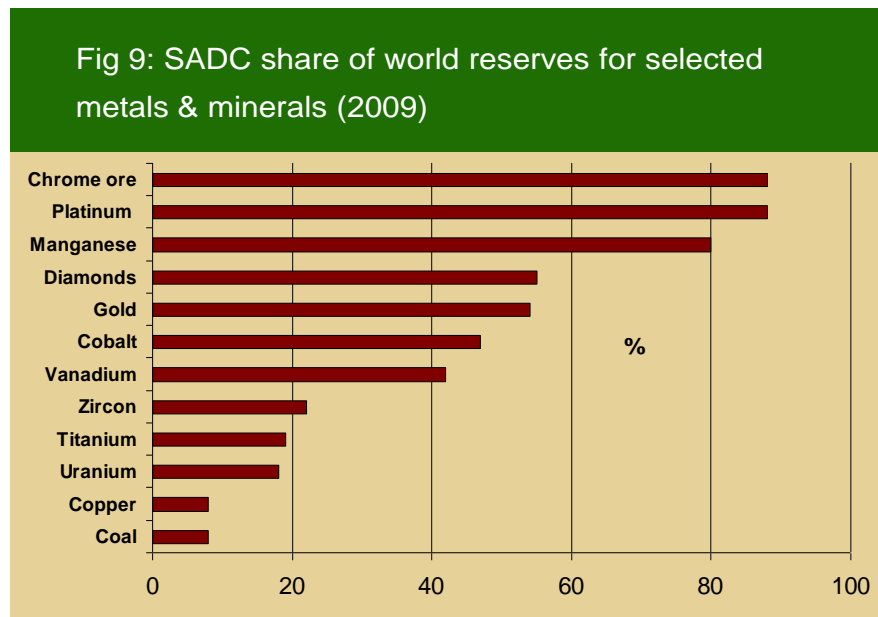
Table 4 illustrates the fact that six non-BRIC emerging markets possess significantly larger economies than South Africa.

<b>Table 4: Ten largest non-BRIC emerging markets (2010 GDP)</b>	
	<b>\$ billion</b>
Mexico	1,000
South Korea	990
Turkey	730
Indonesia	700
Poland	440
Saudi Arabia	430
South Africa	354
Argentina	350
Iran	340
Thailand	310

Justification for the decision to admit South Africa to a group of countries that are destined to become superpowers during the next two decades should be sought in the context of the Southern African Development Community (SADC) becoming a potential future regional superpower.

When viewed from the perspective of the whole SADC region, which is destined to become a closer-knit common market (including a common currency), total GDP jumps to \$560 billion.

It is a little known fact that the SADC region's combined population of approximately 270 million people ranks third amongst emerging markets, with only China and India possessing larger populations.



Last, but not least, is the extraordinary wealth of metal & mineral resources within the region, as aptly illustrated by figure 9.

Emerging markets, particularly in Asia, will not be able to sustain high growth in the absence of sufficient commodity supplies and South Africa's membership of the elite new BRICS grouping will undoubtedly shift the focus of global investors towards the whole of the SADC region and its vast economic potential.