

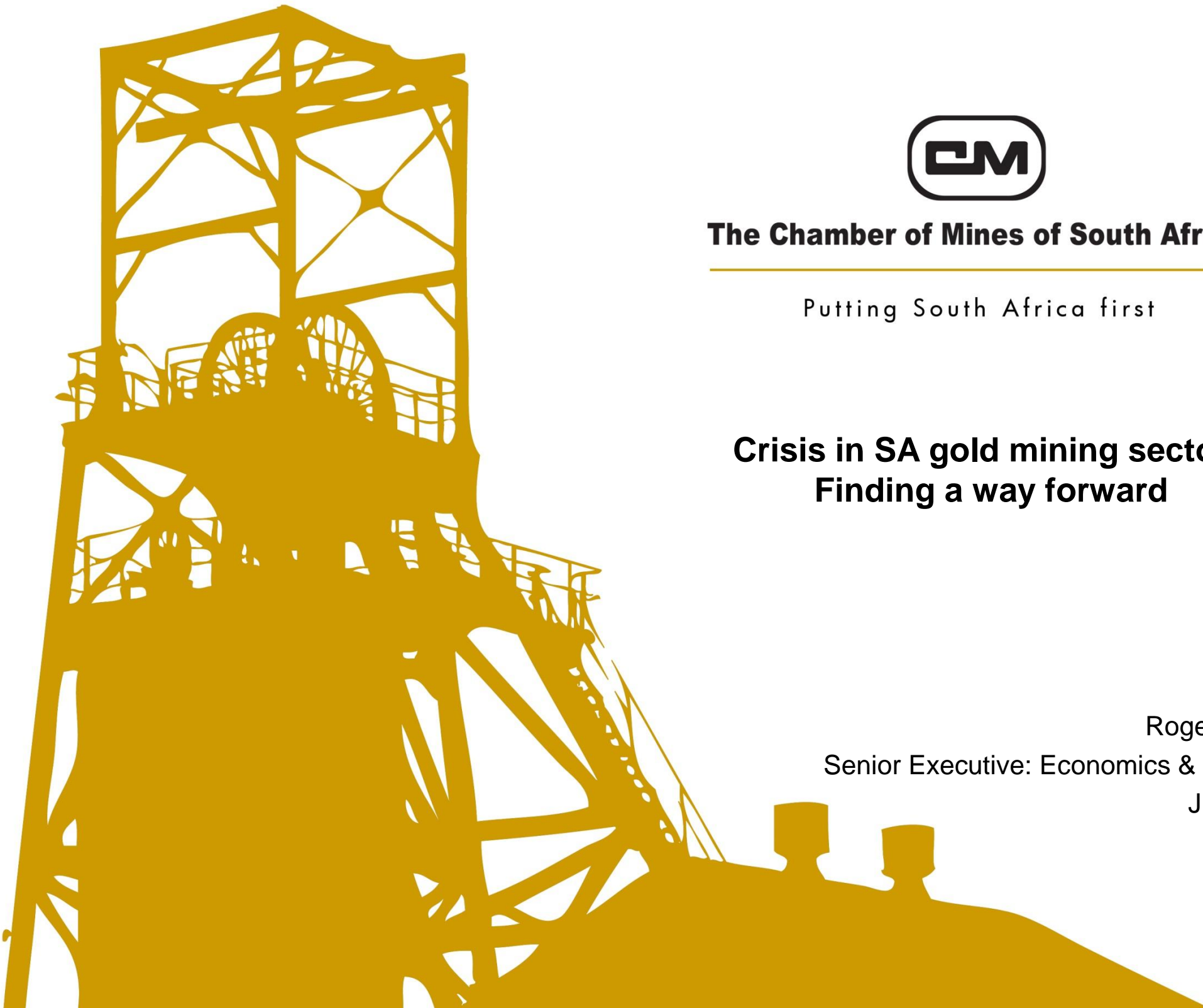


The Chamber of Mines of South Africa

Putting South Africa first

Crisis in SA gold mining sector? Finding a way forward

Roger Baxter
Senior Executive: Economics & Strategy
July 2013



Presentation outline



▶ Global gold environment

SA gold mining industry

Challenges facing the industry

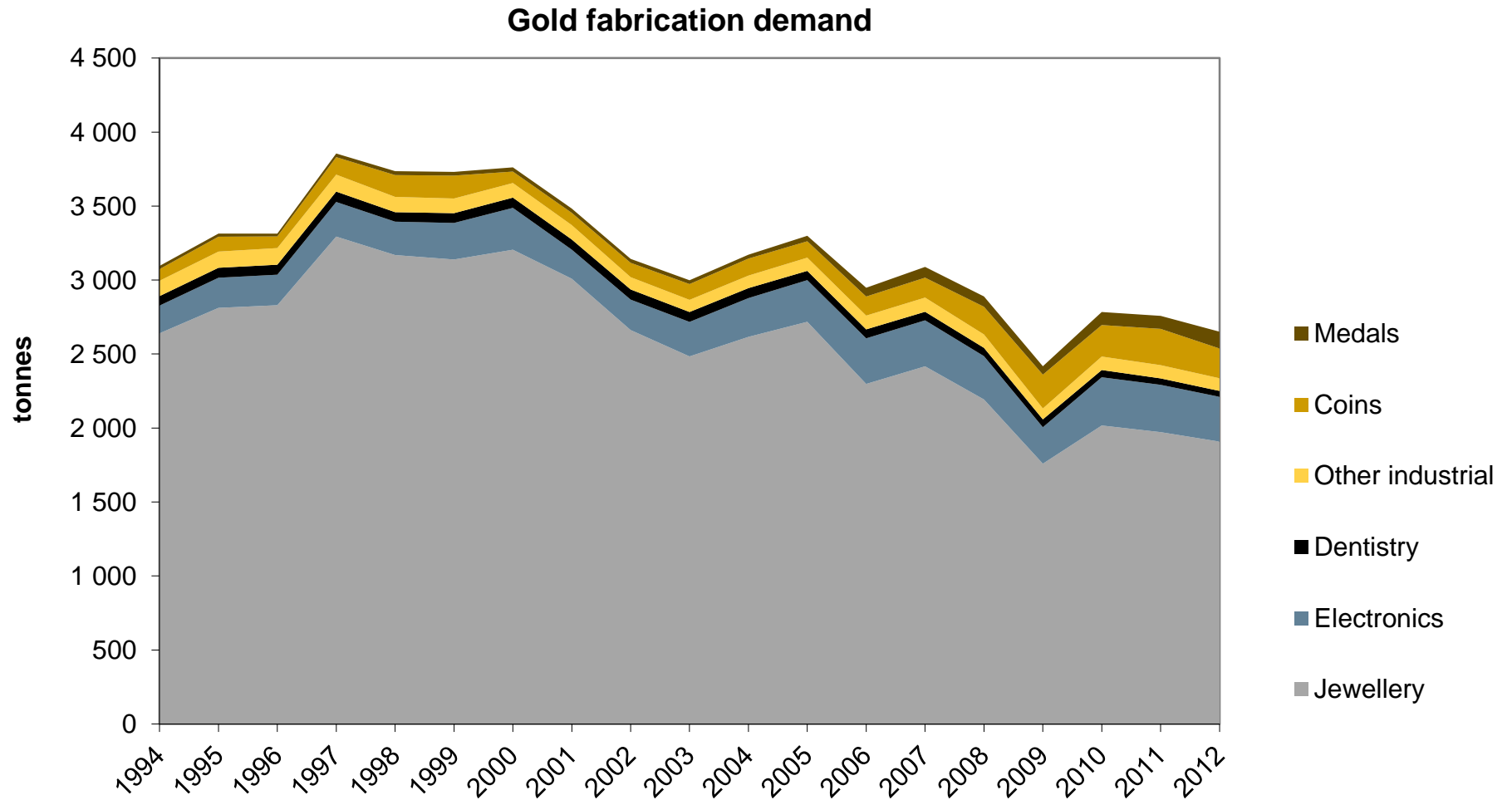
Resolving the challenges

Gold market over past decade experienced significant bull market

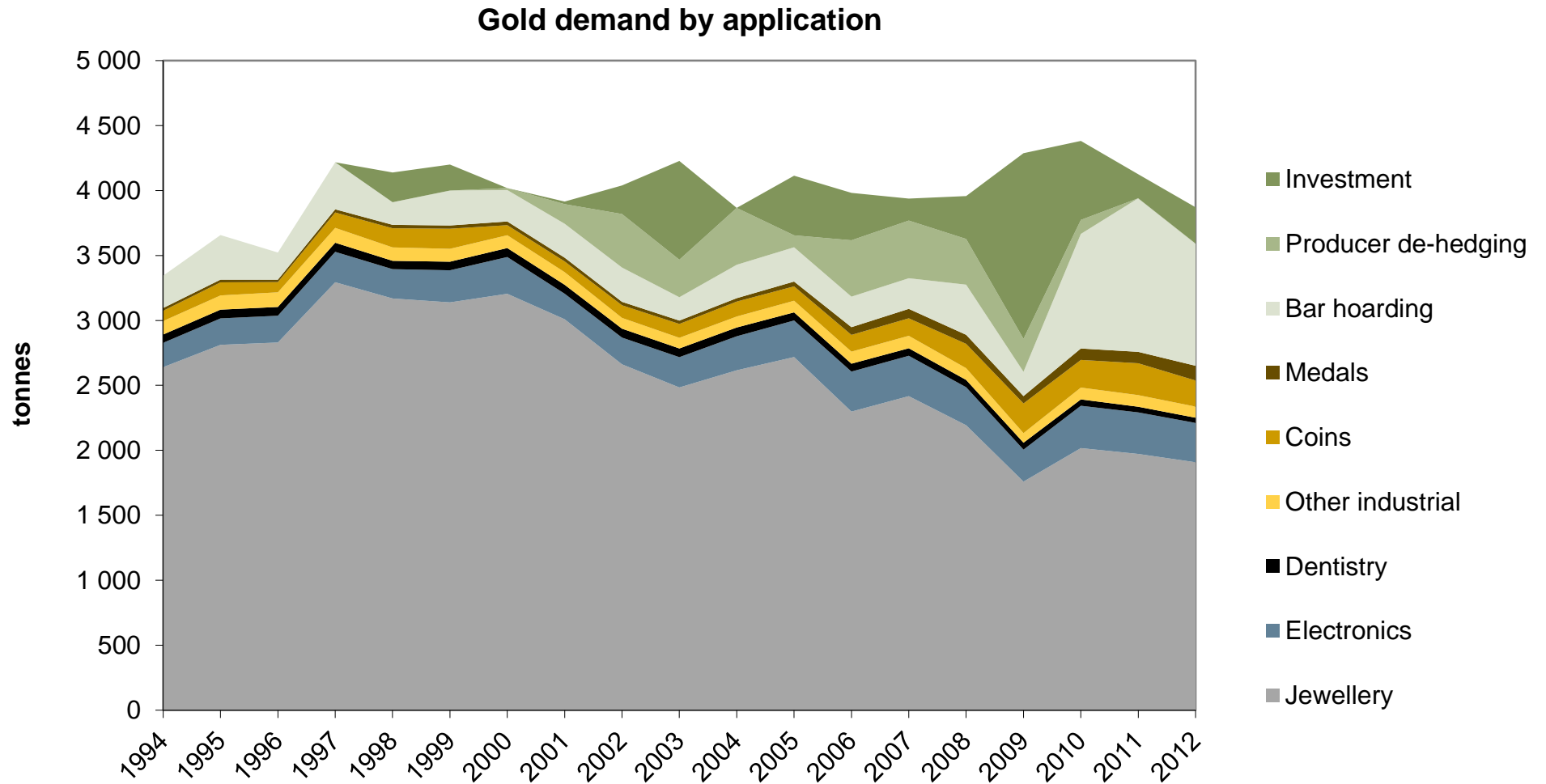


- Global gold market, between 2002 and late 2011, driven by:
 - changing structure of demand
 - significant growth in investment demand
 - marked decline in producer hedging
 - global uncertainty, elevated risk due to GFC, large sovereign debt levels, credit risks
 - availability of global liquidity (quantitative easing by central banks, very low interest rates)
 - central bank procurement

While gold fabrication demand has fallen...



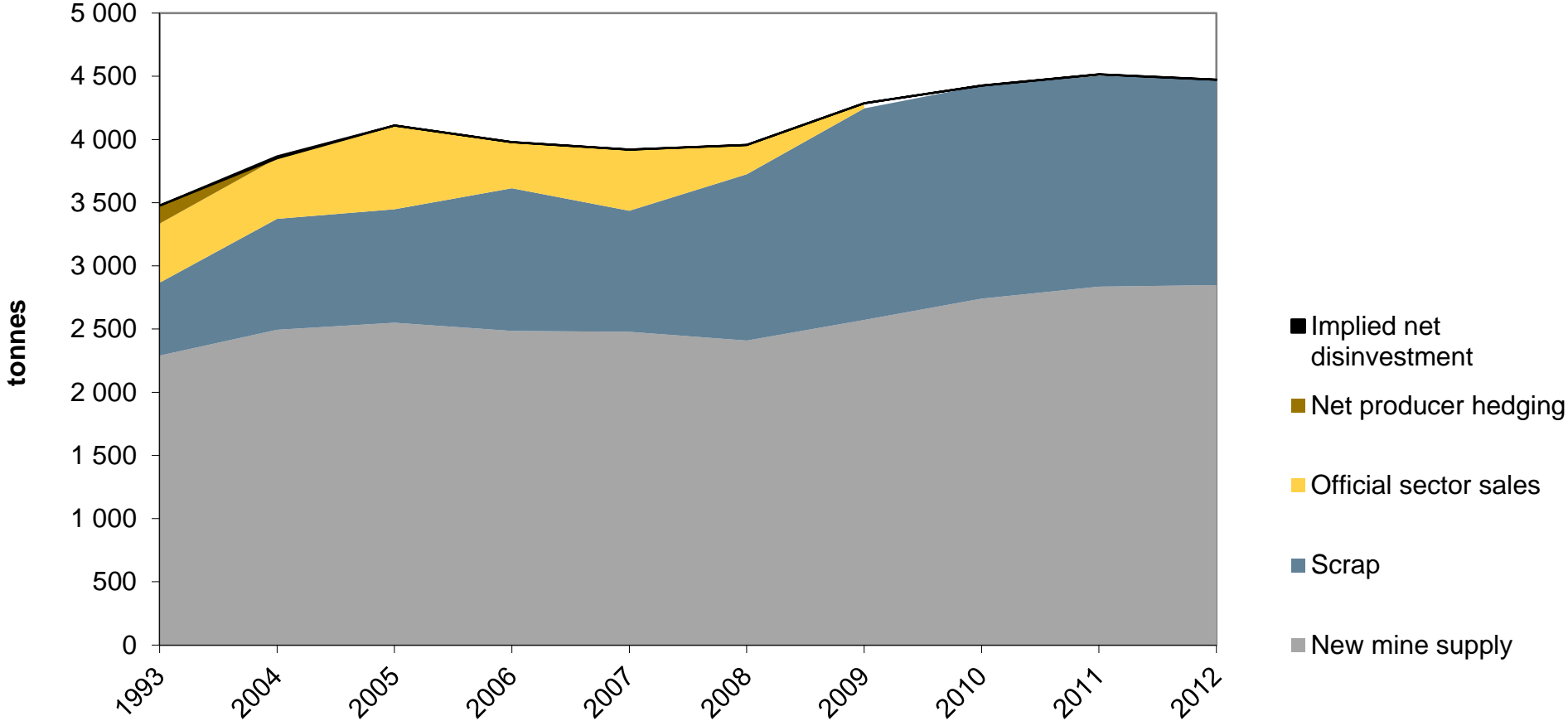
...investment demand, bar hoarding and producer de-hedging have filled the gap



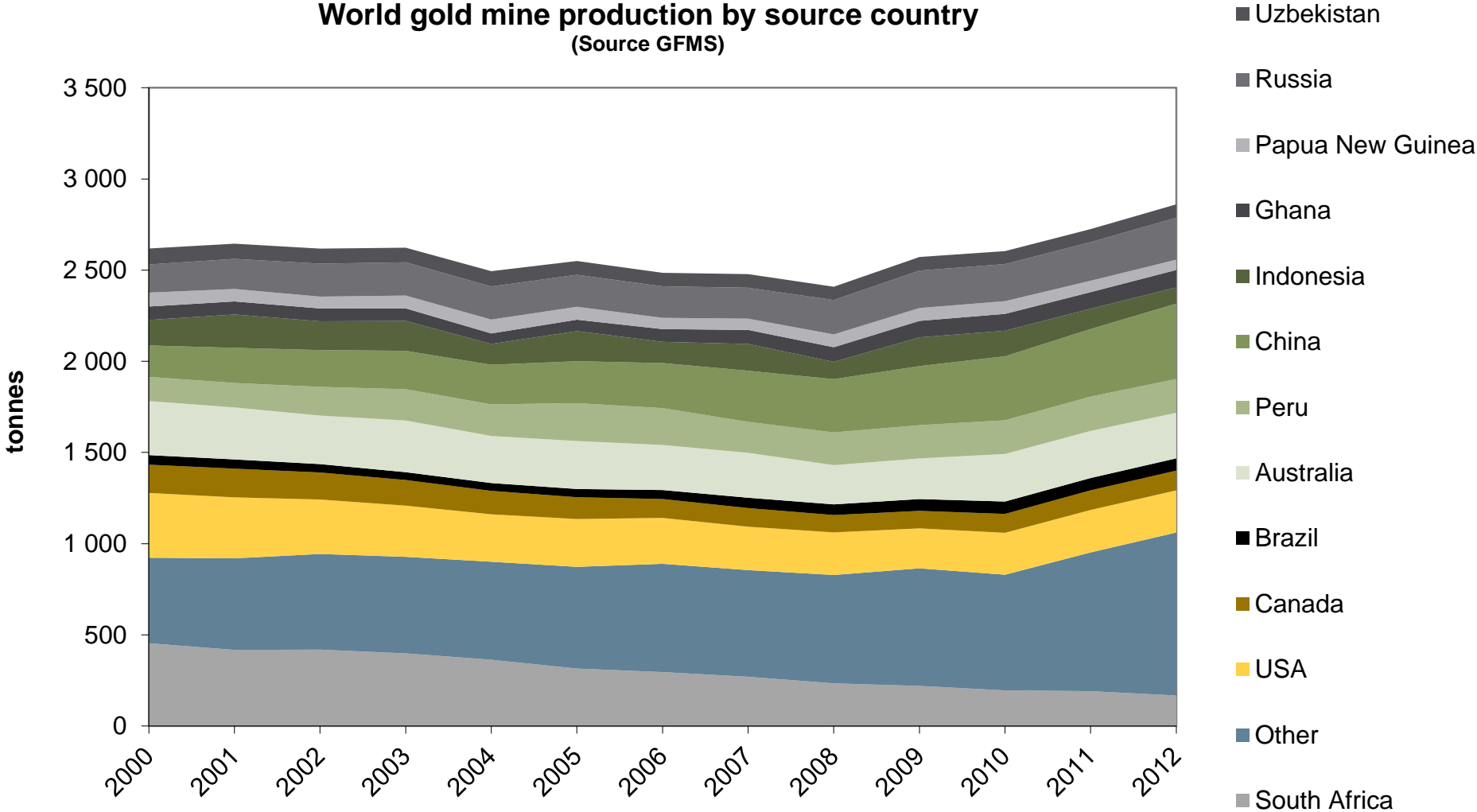
Since 2008 new mine supply has grown by 4.4% per annum & supply from scrap has grown



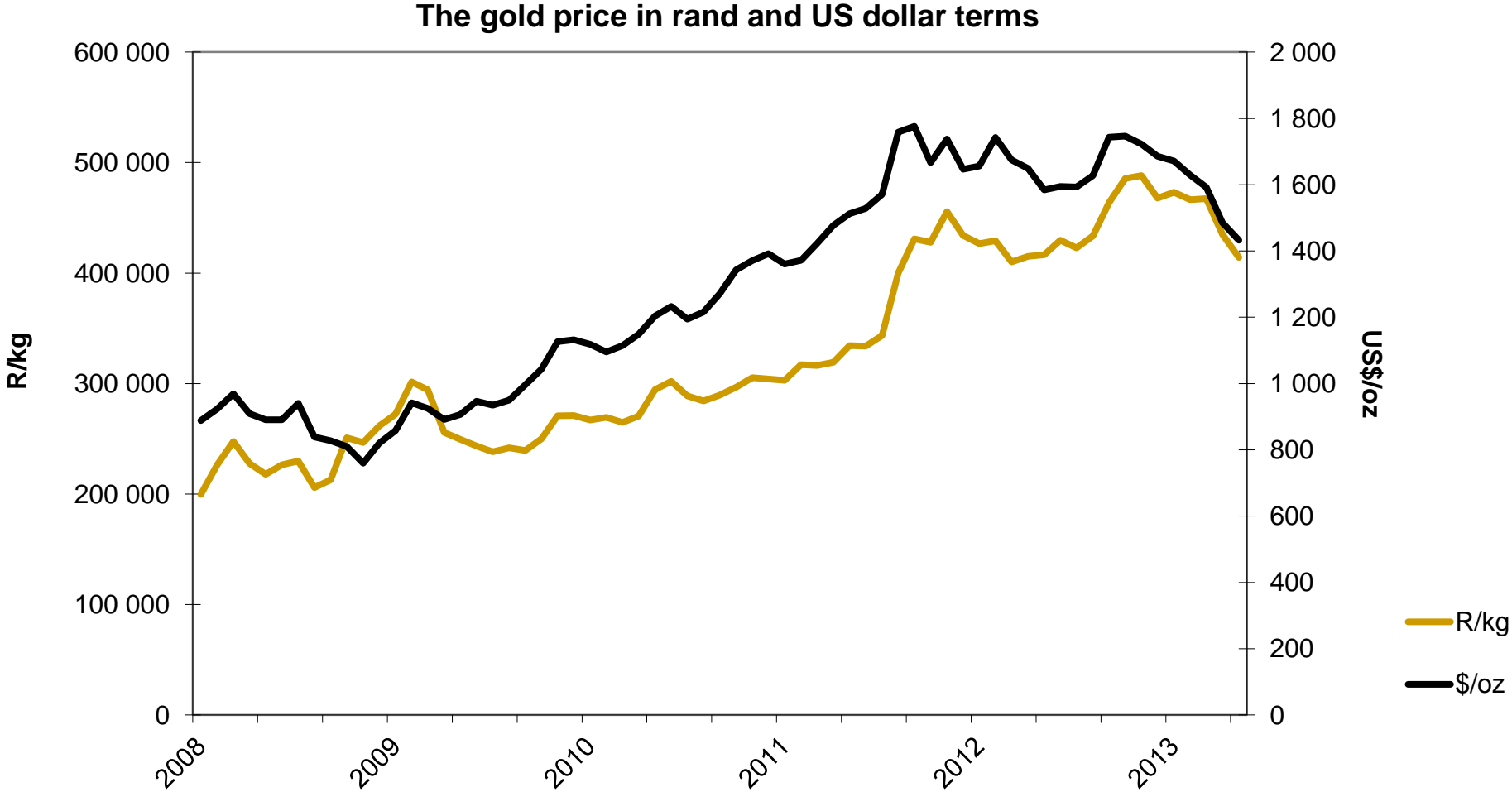
World gold supply by main source
(Source GFMS)



China is the world's largest gold producer, followed by Australia, USA, Russia, Peru & South Africa



However, the gold market experienced a significant correction in early 2013 (the rand price fell by 20% or R100 000/kg)



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Global gold environment

▶ **SA gold mining industry**

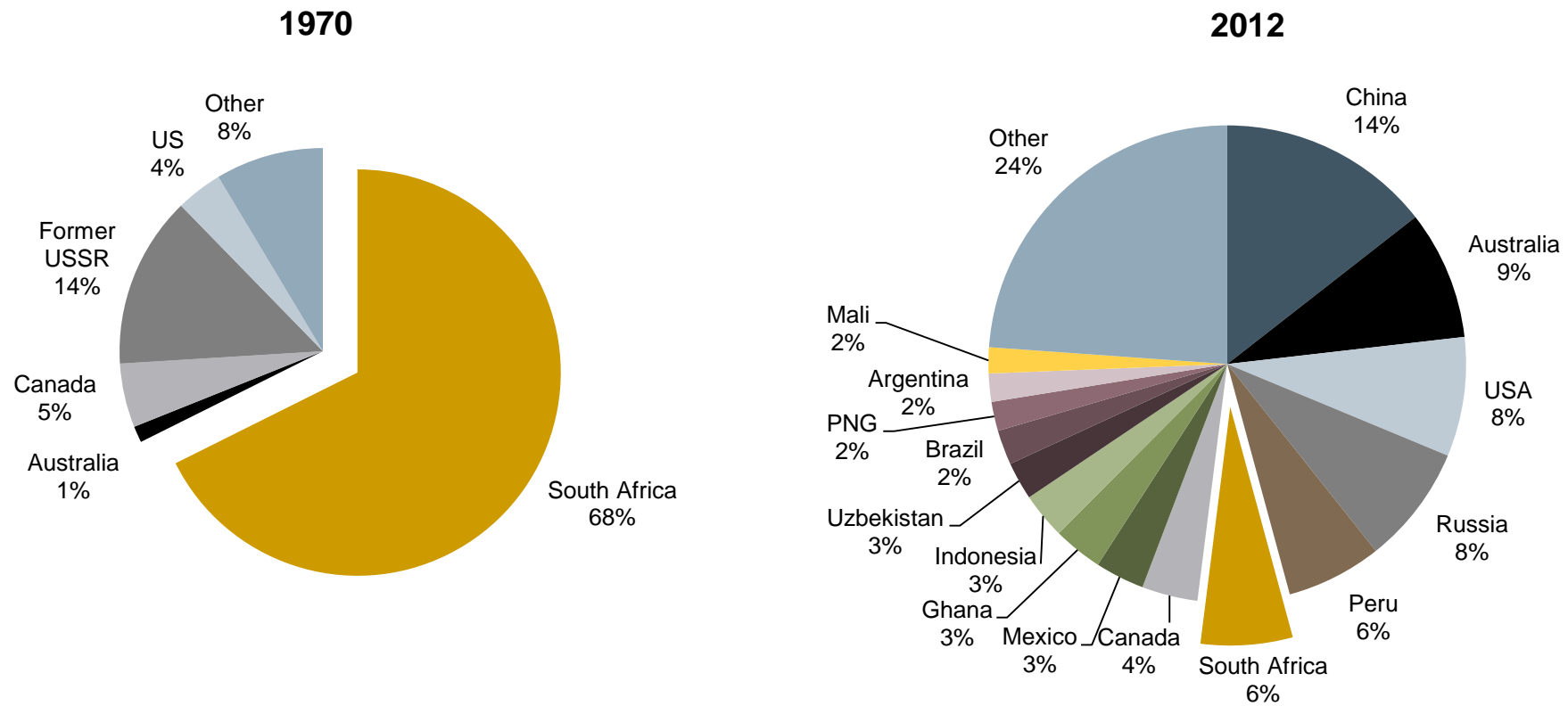
Challenges facing the industry

Resolving the challenges

From being the dominant world gold producer in 1970



Contribution to world gold production:

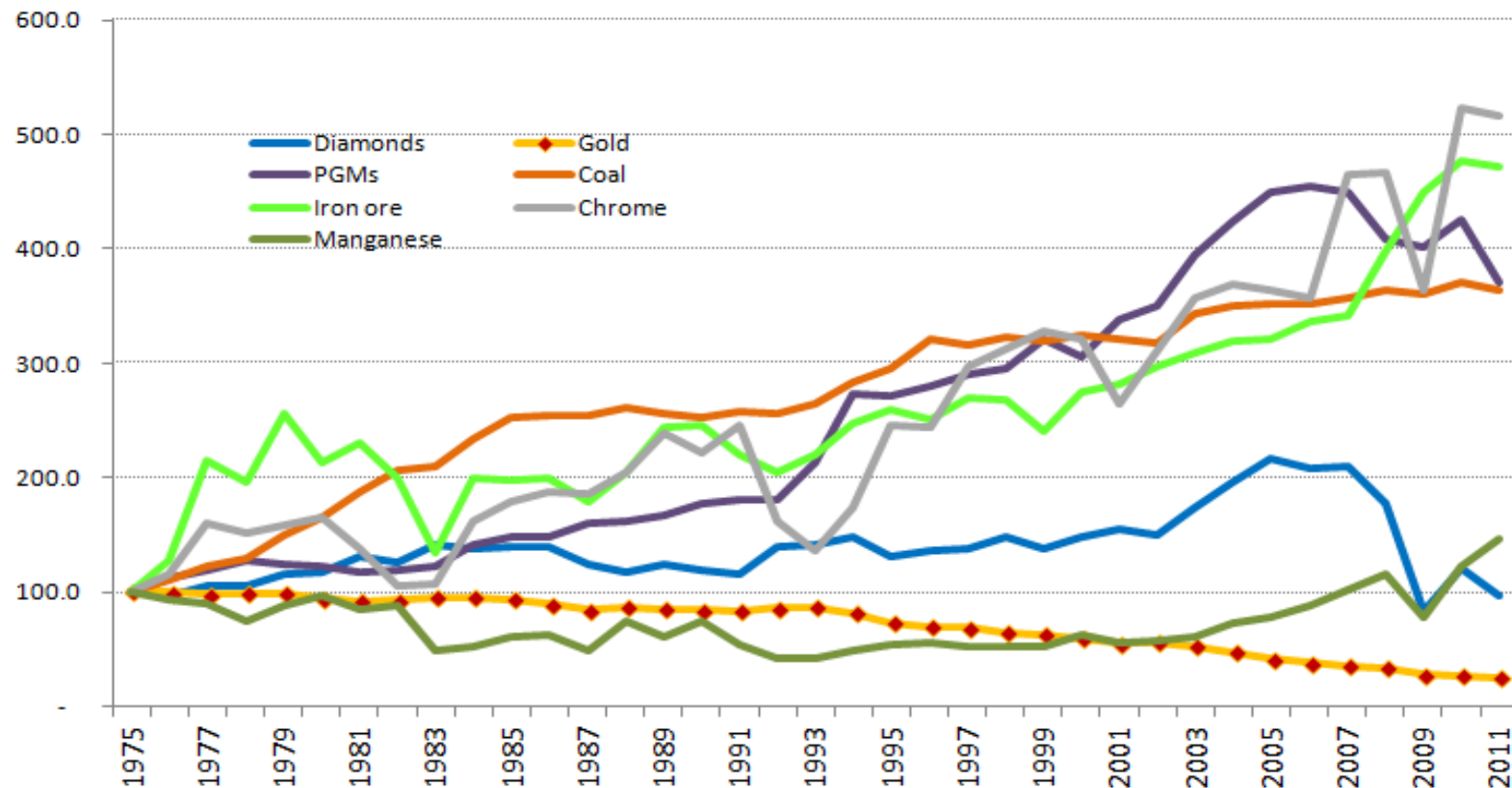


... we fell to number 6, despite being ranked number 1 in gold resource

While other commodities have grown ...



- Gold production has declined by 83%
- Over the last decade, an average decline of 8.2% per annum

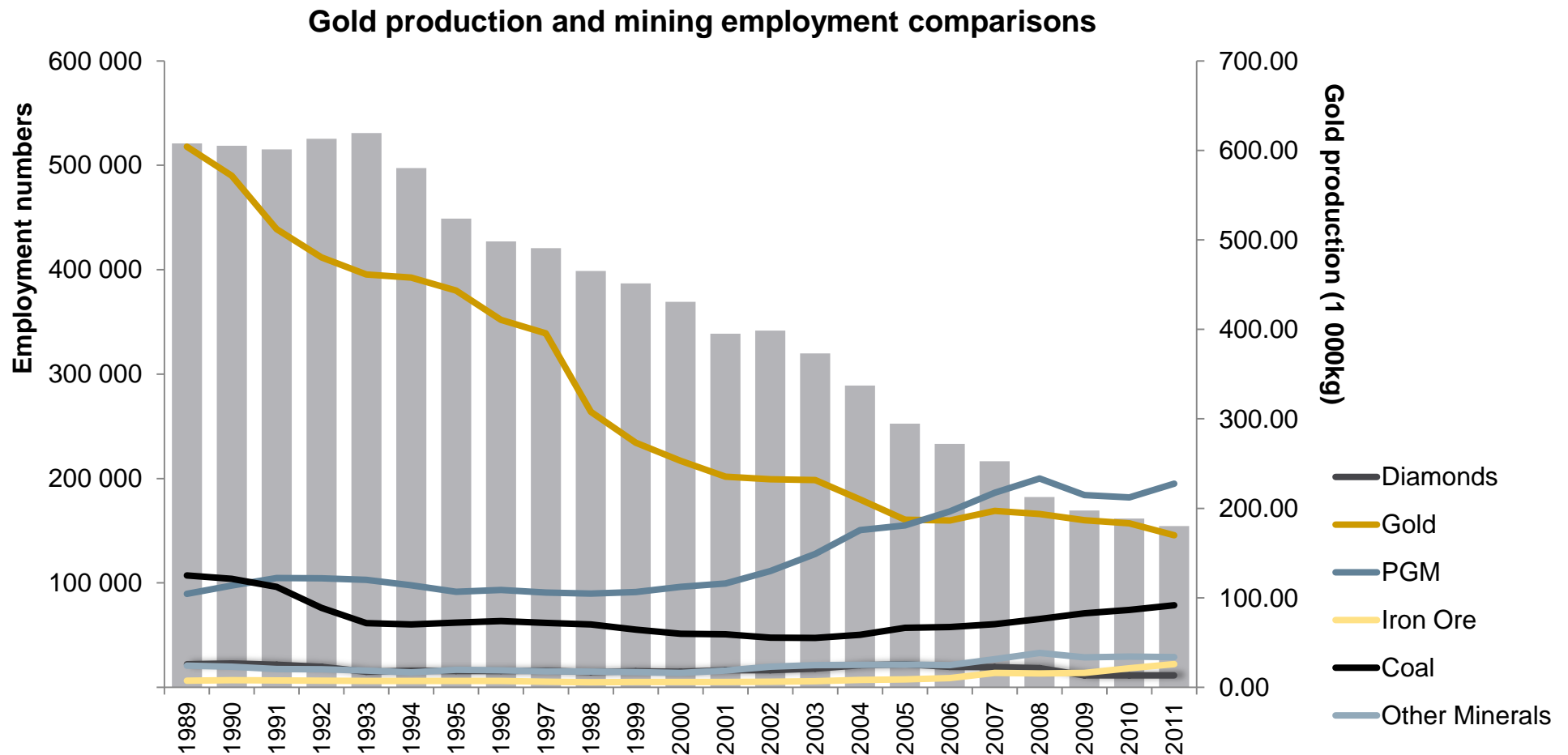


Source: StatsSA, CoM EAU

Employment has fallen with production



- Gold production declined by 427 tonnes since 1989, resulting in 372 000 job losses



Gold mining remains important to South Africa economy



- In 2011
 - third-largest component of SA mining sector on basis of contribution to:
 - GDP (1.5%)
 - export earnings (10.7%)
 - employment (145 561)
- In 2012
 - largest mineral export at R72 billion (above platinum group metals and coal)
 - produced 167 tonnes of gold valued at R77 billion
 - employed 142 193 employees, paying them R22 billion in salaries/wages
 - paid R2.1 billion in corporate tax
 - spent R13.6 billion in capex
 - paid R1.2 billion in dividends

Gold mining: a significant contributor to economy, exports, taxes, employment



		2007	2011	2012
Contribution to GDP	Rm	30 604.9	44 954.0	
% of total GDP	%	1.5	1.5	
GDP growth rate (gold)	%	19.4	23.8	
Contribution to GDP + multipliers & induced effect	%	3.0	3.1	
Share of mining GDP	%	19.5	17.5	
Production	Moz	8 121 202.5	5 793 041.7	5 376 738.4
Production	Kgs	252 598.0	180 184.0	167 235.5
% growth in production	%	(7.0)	(4.5)	(7.2)
Total Sales	Rm	38 035 724.4	68 891 412.8	76 882 443.5
Export sales	Rm	35 953 993.3	65 258 301.7	71 961 756.6
Gold Exports- % of total merchandise exports	%	8.1	10.7	9.9
Employment	number	169 057.0	145 561.0	142 193.0
Wages paid	Rm	14 709 458.7	20 948 450.8	22 045 166.9
Average earnings per worker (annual)	R/a	87 009.0	143 915.0	155 037.0
Capex spent (CoM members)	Rm	8 141.5	11 784.1	13 553.3
Taxes paid (CoM members)	R	1 004.5	1 838.1	2 057.5

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▶ **Challenges facing the industry**

Resolving the challenges

Since late 2011, negative factors affecting South African gold mining



- Falling gold prices (sharp fall in 1H 2013)
- Rapidly escalating input costs
- Declining grade
- Falling productivity
- Illegal strike action
- ±61% of sector either marginal or loss-making on cash cost basis in Q4 2012
 - using current price of R401 000/kg
 - excluding capex
- If capex is included all companies are loss-making

South African gold mining sector economic contribution hard hit



- In 2012, production fell by 12.4% to 167.2 tonnes
 - lowest level since 1905
- Employment fell from 145 561 in 2011 to 142 193 in 2012
 - pressure for further restructuring is building
- Export contribution declined from 10.7% in 2011 to 9.9% in 2012
 - despite being SA's biggest mineral export
- Taxation, royalty contribution under pressure as mines' viability is threatened

Input costs increasing at very rapid pace

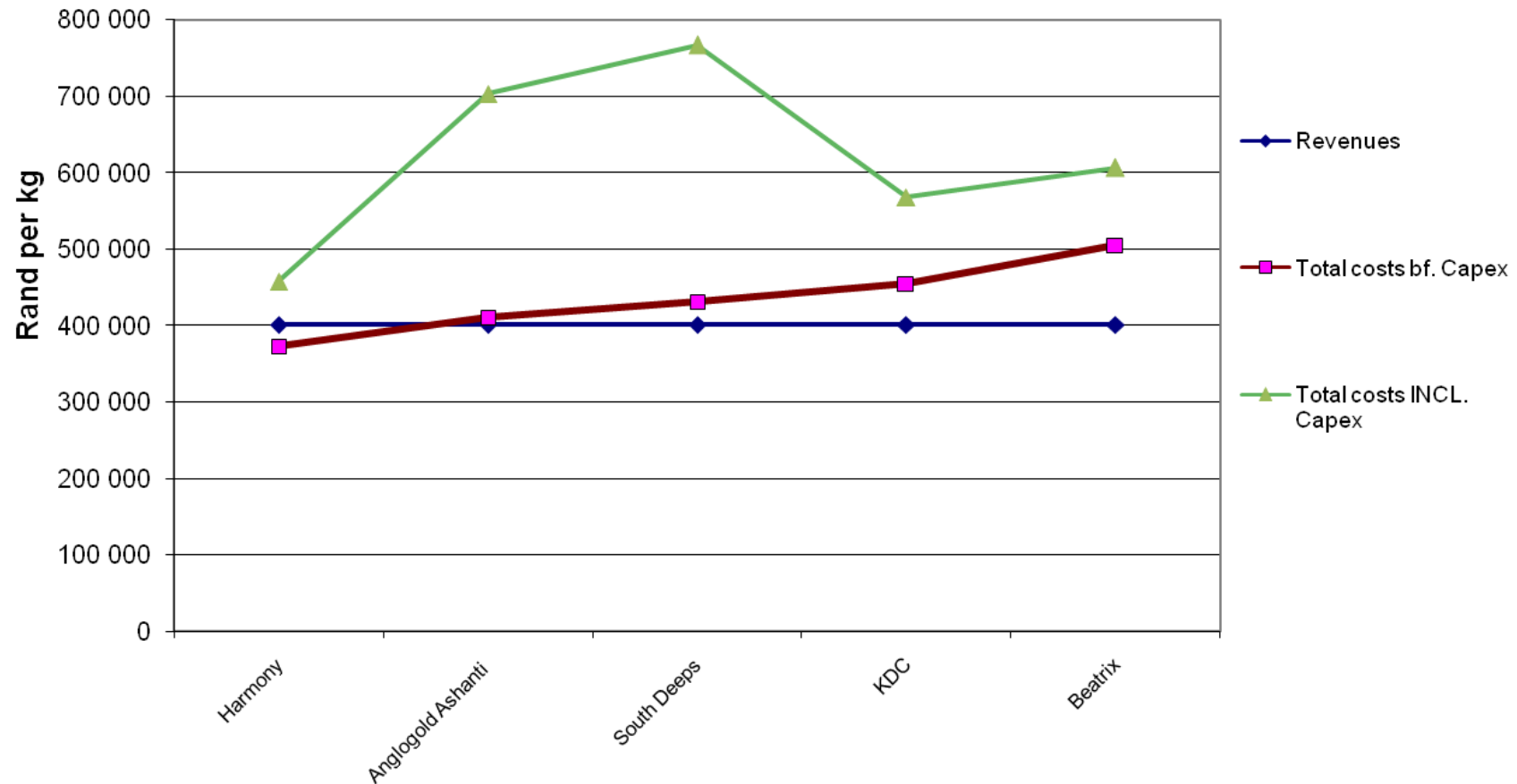


- Large proportion driven by 'administered prices' (such as electricity, water, etc), by international pricing (steel and diesel)
- Between 2007-2012:
 - 238% increase in electricity price to mining sector, from 18c/kWh in 2007 to 61c/kWh
 - 15.7% p.a average rise in diesel cost, due to higher international oil price (up 69.3% overall)
 - 15.3% p.a increase in reinforcing steel price (57.5% in total)
 - 12% p.a rise in average remuneration paid per worker ($\pm 5\%$ higher than producer inflation)

At a R401 000/kg gold price 61% of companies are loss-making before capex



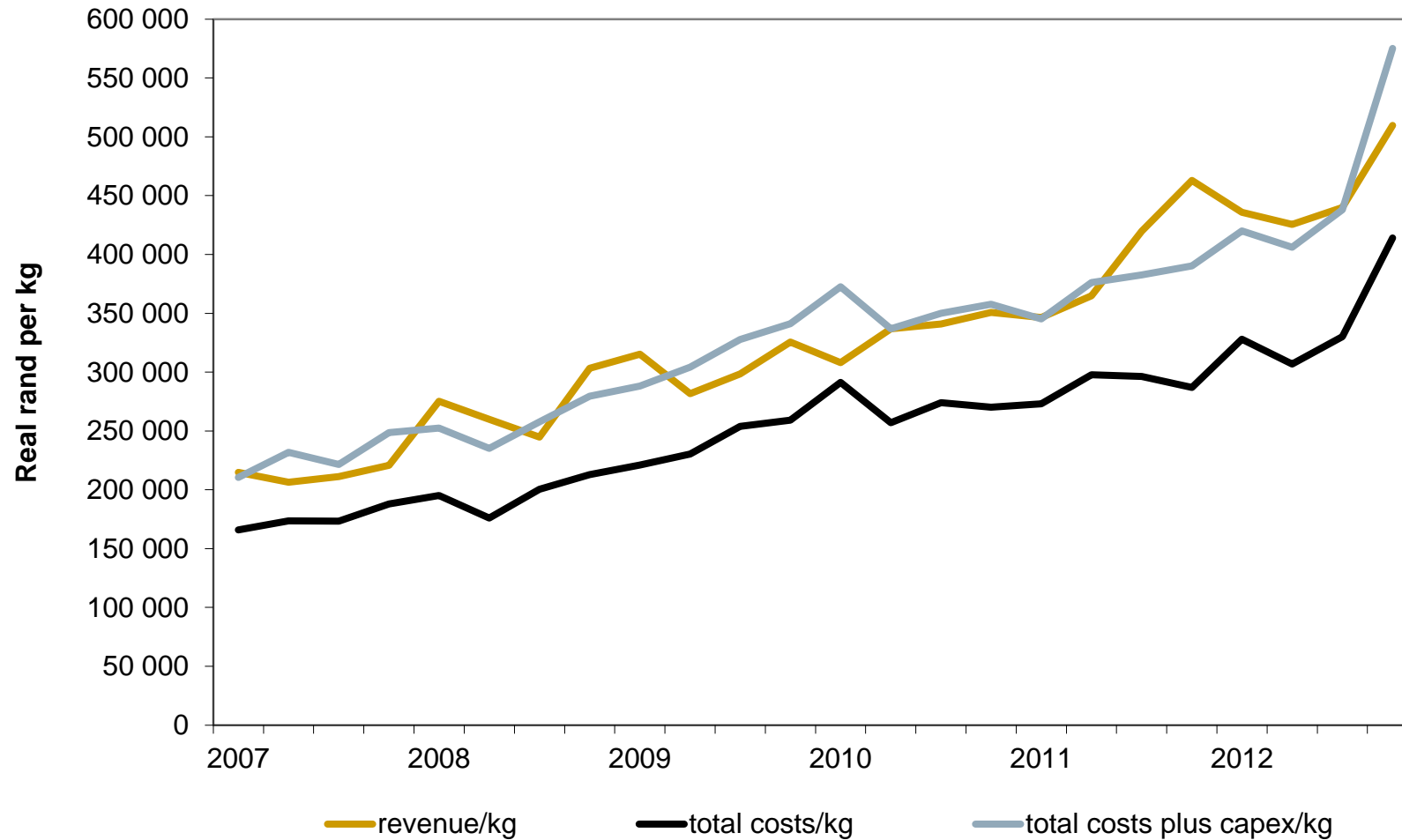
Gold mines cost curve, 4Q 2012 on a total production cost, plus capex basis with a price of R401 000/kg



Higher price benefit eaten away by rising costs



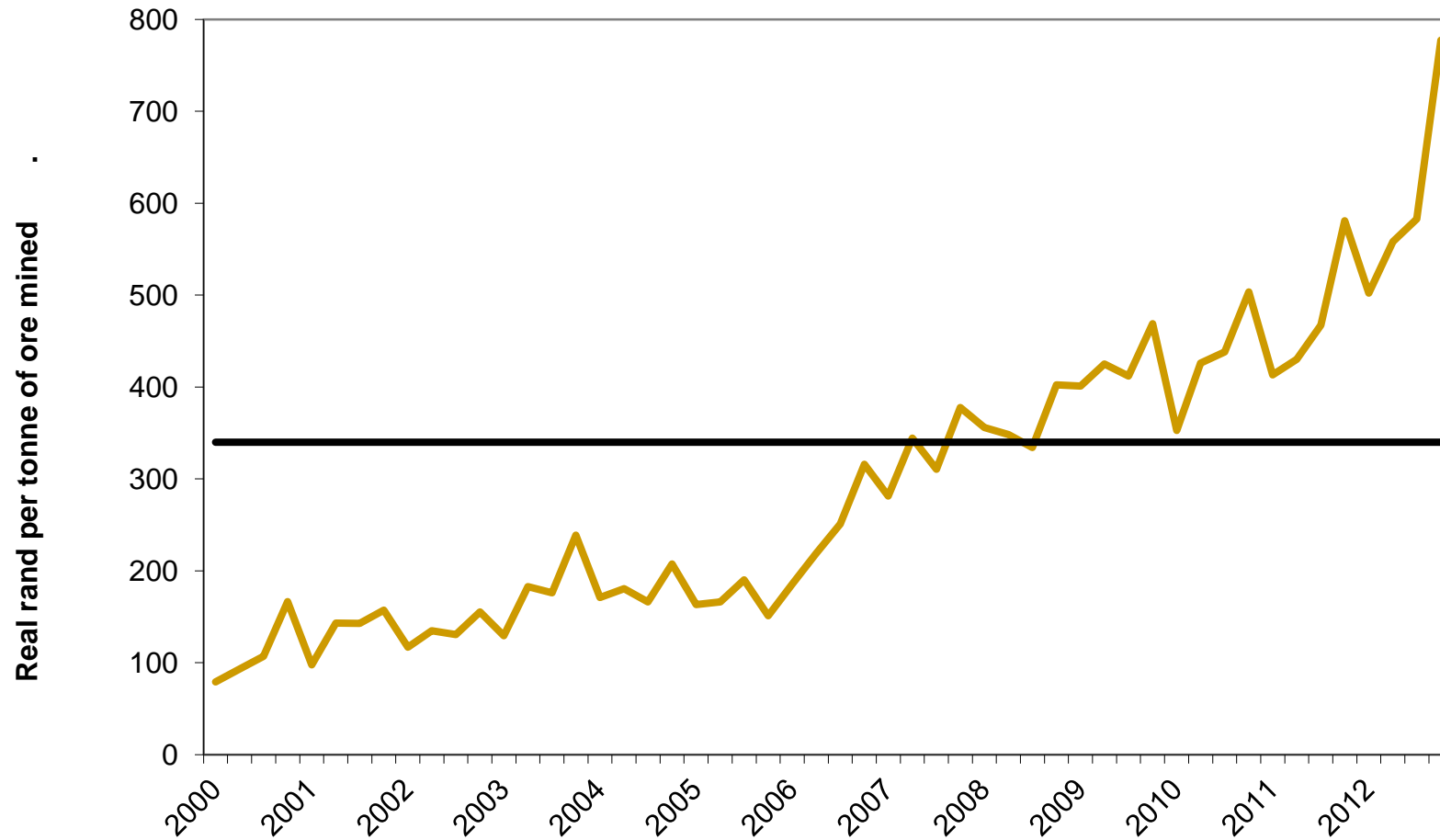
Operating revenue, total operating costs and operating costs plus capex, all per kg in real Q4 2012 rand terms (using PPI as deflator)



More and more spent on sustaining capex



Real capex per tonne of ore mined (excluding waste) using PPI as deflator (Q4 2012=100)

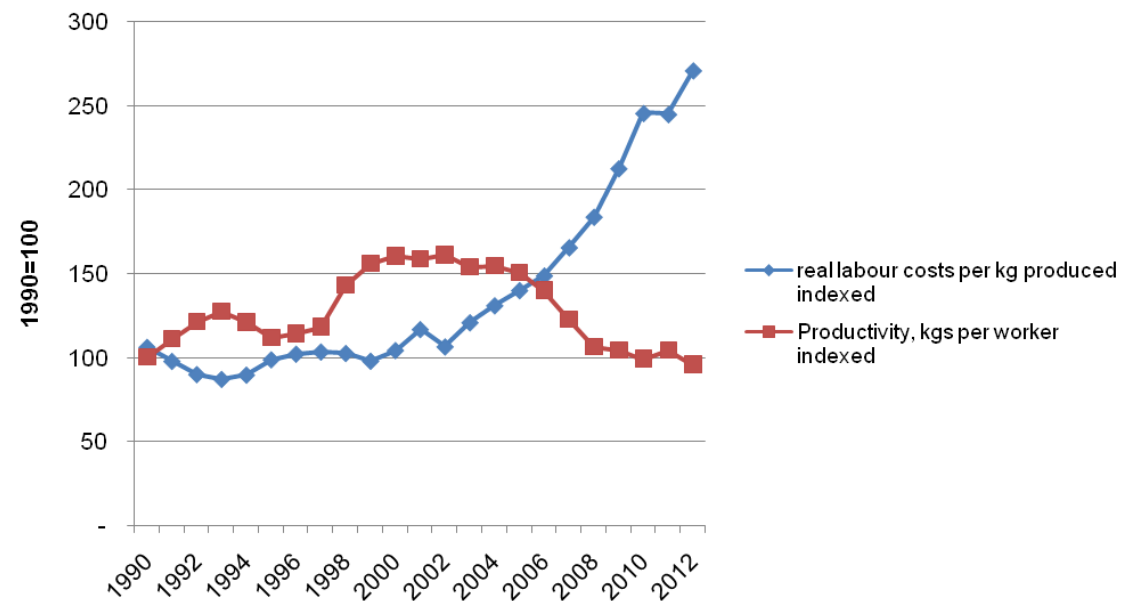


Productivity per employee on negative decline...



- Cost per employee increasing
- Productivity declines driven by:
 - production stoppages
 - declining grades
 - distance from shaft
- We need to work smarter not harder

RSA gold mining, labour productivity (kgs produced per employee) and real labour costs per kg of gold produced, based indexed to 1990



Source: DMR/StatsSA/Chamber

Situation exacerbated by 2012 illegal strikes

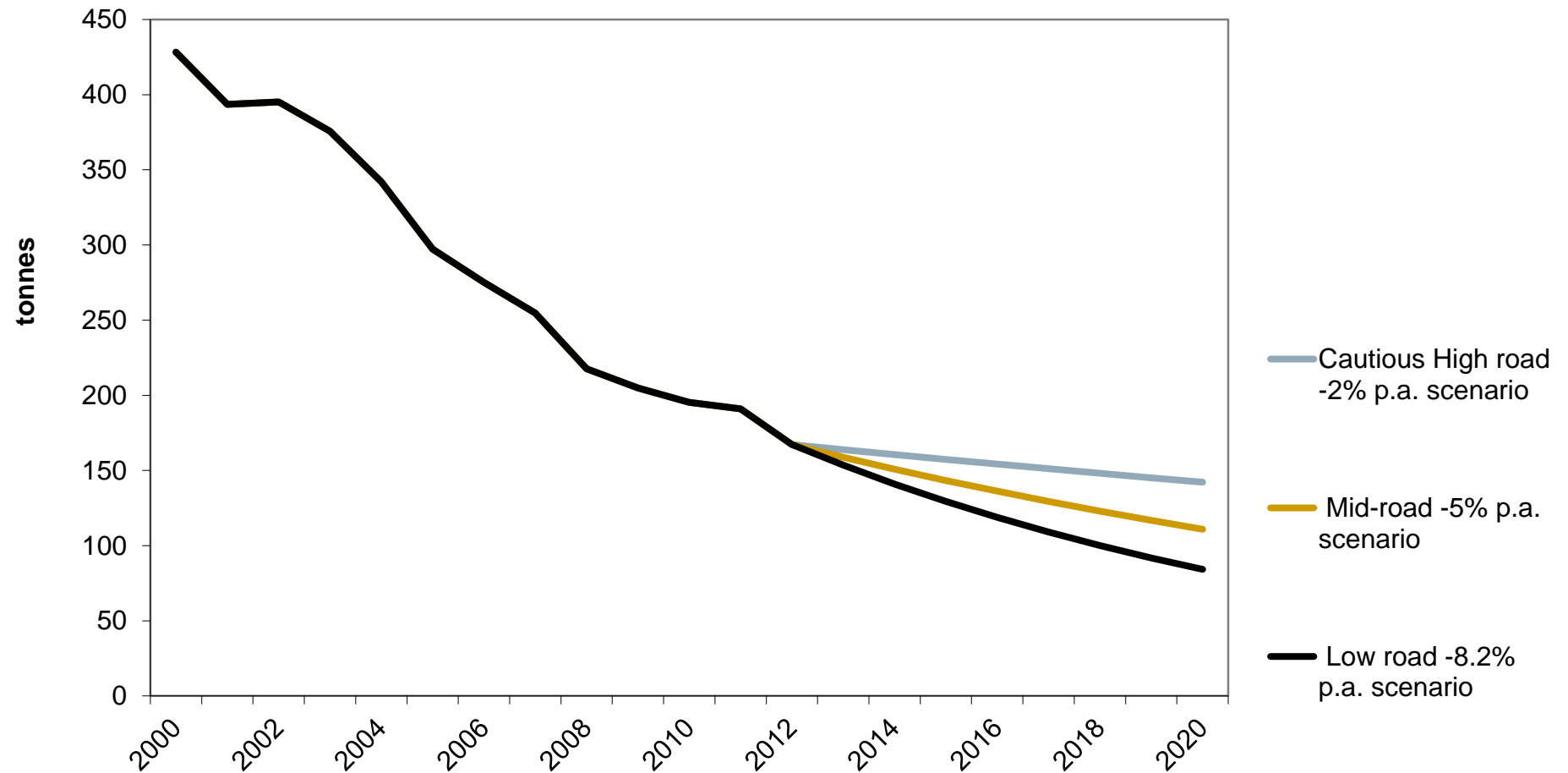


- Gold mining sector was hard hit by illegal strikes, and the effects of the Marikana tragedy
- Strikes:
 - induced decline in production
 - exacerbated cost squeeze
- Revenue of ±R5 billion lost
- Many support industries negatively affected

If current trend continues SA could produce <90t Au by 2020 and employ <60 000 people



SA gold production, actual for 1993 to 2012, scenarios for 2013 to 2020



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▶ **Resolving the challenges**

Improving productivity, lowering costs



- Quantum leap in productivity unrealistic based on existing systems, technology
- Sector is mature, with deep operations, getting deeper, more complicated to mine
- Some improvements to existing systems possible
- Currently, only 220/240 productive shifts (i.e. achieve blast and progress) per annum achieved out of 300 shifts theoretically possible
- Changing shift systems, allowing for multi-shifting (more than one blast per day) could make positive difference
- The Sindisa project is critically important

Improving productivity, lowering costs, cont'd



- Improving the application of S54s could also help because:
 - industry is 100% committed to improving safety and good progress made in past five years
 - too many shafts/ mines being closed by S54 notices, where remedial action through section 55's would be more appropriate
- Quantum leap will require adoption of more mechanised development, stoping methods
 - obvious implications for employment levels (longer-term process)

Way forward



- All stakeholders have role to play in:
 - moderating cost pressures, improving productivity
 - restore production cycle stability
 - reposition industry for growth through focus on competitiveness
 - contributing to community development
 - includes all tiers of government, mining companies, communities, organised labour



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Gold mining matters for South Africa

