Mine 2014

Realigning expectations

pwc

Review of global trends in the mining industry

What is *Mine?*

- Analysis of the 40 largest listed mining companies by market capitalisation
- Sourced from the latest publicly available information
- No adjustments to reflect different reporting requirements or year-ends (report covers reporting periods from 1 April 2012 to 31 December 2013)
- Includes diversified companies (eg Glencore trading and BHP Billiton petroleum, except where noted)
- Entities that are controlled by others in the Top 40 and consolidated into their results have been excluded, even when minority stakes are listed

11 years of *Mine*

2004
Mine

2005
Enter the Dragon

2006
Let the good times roll

2007
Riding the wave

2008
As good as it gets?

2009
When the going gets tough...

2010
Back to the boom?

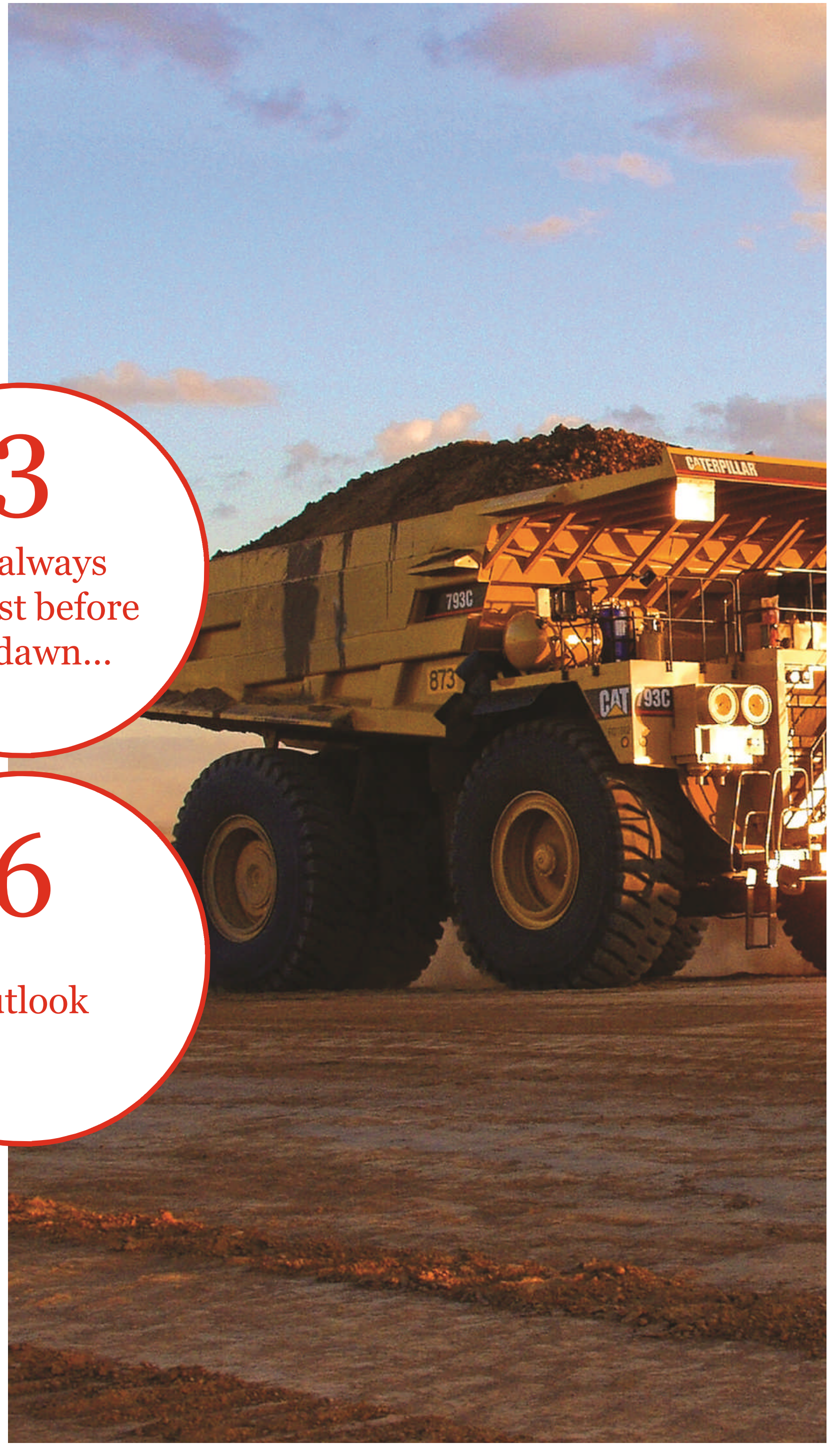
2011
The game has changed

2012
The growing disconnect

2013
A confidence crisis

2014
Realigning expectations

Contents



Realigning expectations – lifting off the bottom

1

Realigning expectations – lifting off the bottom

2013 was a year that forced miners to realign expectations…

… the Top 40 bit the bullet, booking impairments of $57 billion in 2013

… this drove aggregate net profits of the Top 40 to their deepest depths in a decade at $20 billion

… and market capitalisation of the Top 40 fell by $280 billion, or 23%

… net debt is up 42%

… but dividends paid continued to increase

… capital velocity has flattened, showing the change in priorities and tightening of belts

Realigning expectations – lifting off the bottom

All of this in response to one of the most difficult operating environments for years …

… new CEOs installed in nearly half of the Top 40 over the last two years

… commodity prices are down

… increased demand from shareholders to focus on core operations and increase returns

… cost reduction initiatives taking time to implement

… focus on delivering disciplined capital allocation

… licence to operate becoming increasingly difficult, particularly in emerging economies

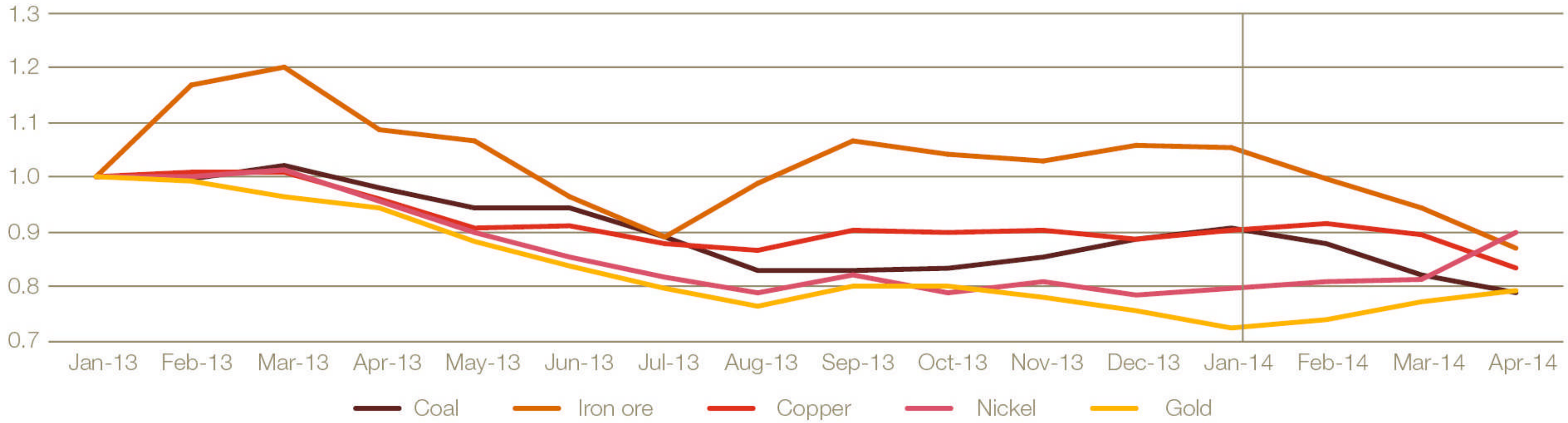
… more emerging markets companies in the Top 40

The mining industry spent 2013 realigning stakeholder expectations and 2014 will see if the renewed strategies of miners can successfully lift the industry off the bottom by delivering sustainable growth…

Commodity prices continued to fall…

- 2013 was another challenging year, with double digit commodity price decreases not uncommon
- Gold suffered the greatest drop, down 27% in 2013, it’s biggest annual decline in over 30 years
- Nickel and gold have recovered some ground in early 2014, while other prices continue to fall

Price indices, selected commodities (January 2013 = 1)

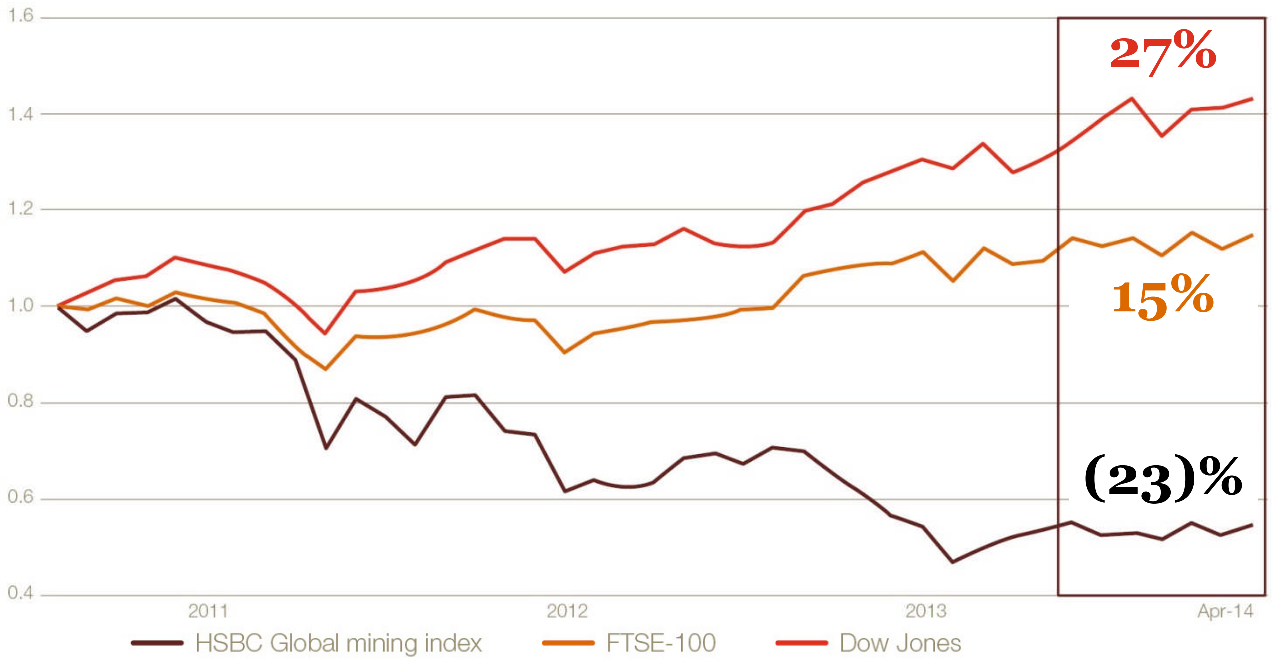


Source: The World Bank

…driving down mining stocks in 2013

- The performance of mining stocks was lacklustre in 2013, down 23%
- In contrast, the Dow Jones and FTSE-100 rose by 27% and 15%, respectively in 2013, largely due to the Fed's tapering of QE measures and renewed optimism towards the US economy

Global mining indices (January 2011 = 1)



Source: Bloomberg

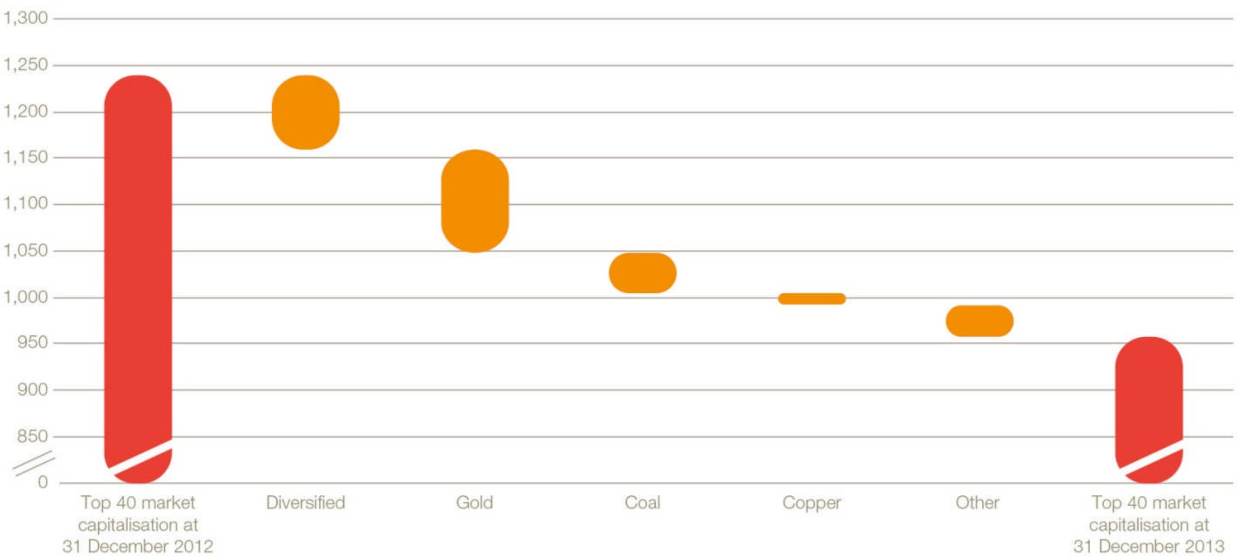
A look at 2013's Top 40

2

A gloomy year for market capitalisation

- 2013 year-end market capitalisation for the Top 40 closed at roughly $958 billion, a drop of 23% from $1,238 billion at the end of 2012
- Gold miners were hardest hit, with the segment losing $110 billion off its market capitalisation in 2013, representing 40% of the year's decrease

Change in Top 40 market capitalisation ($ billion)

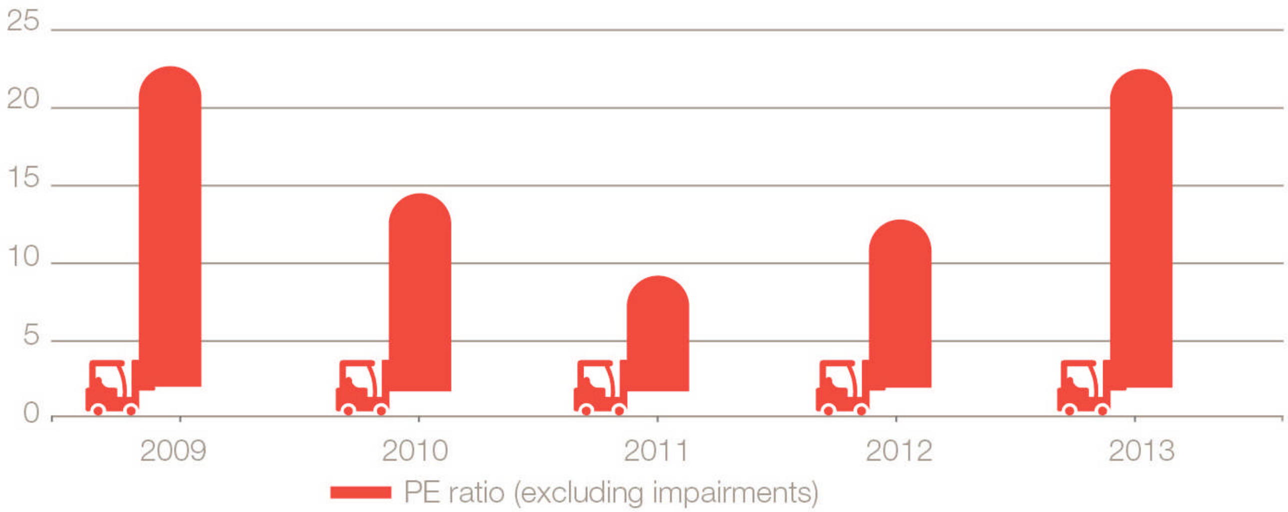


Source: PwC analysis

Low earnings drove a higher price-to-earnings ratio

- Impairments and low commodity prices reduced the Top 40's earnings to $20 billion from $72 billion in 2012, the lowest profit level in a decade
- Aggregated results of gold miners weighed on results, with collectively $20 billion in net losses in 2013
- Adjusting for impairment, the Top 40's year-end PE ratio increased to levels last seen during 2009

Top 40 price-to-earnings ratio (excluding impairments)

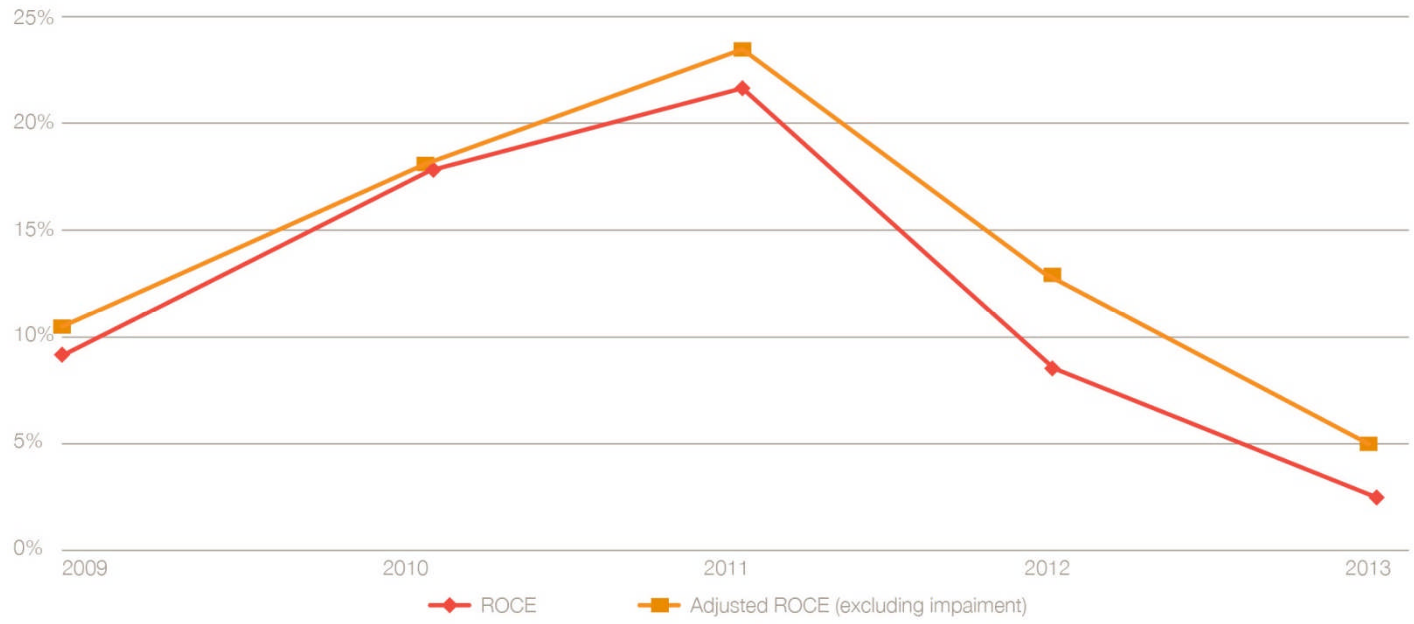


Source: PwC analysis

Top 40 return on capital employed near rock bottom

- Adjusting for impairment, the 2013 ROCE of 5% is even lower than during the global financial crisis in 2009 when ROCE dropped to 10%
- With target ROCE hurdle rates of 15%, this clearly demonstrates the challenges in getting new projects approved

Top 40 return on capital employed (ROCE)

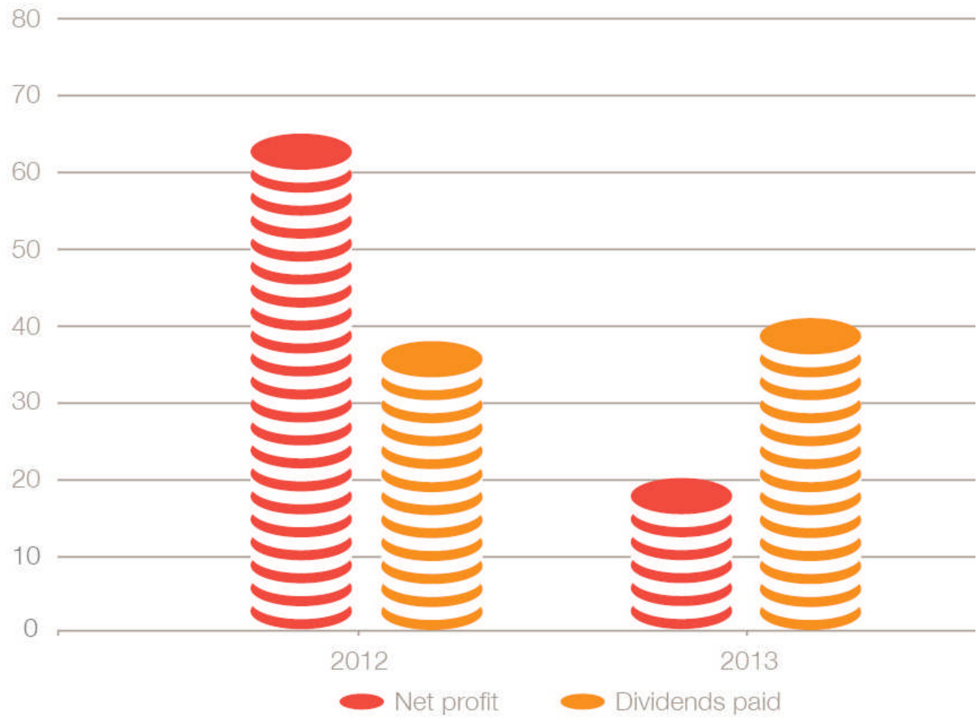


Source: PwC analysis

Dividends paid grew, despite poor profits…

- Over the last five years, the Top 40's dividends have almost tripled, from $15 billion to $41 billion in 2013
- On an aggregate basis, total dividends of $41 billion are double the total net profit of the Top 40 of $20 billion
- Given the uncertainty surrounding commodity prices, this level of shareholder returns may not be sustainable for much longer, as evidenced by changes in dividend policies

Top 40 net income and dividends paid ($ billion)



Source: PwC analysis

The Top 40 maintained or grew production across most commodities, despite softening prices

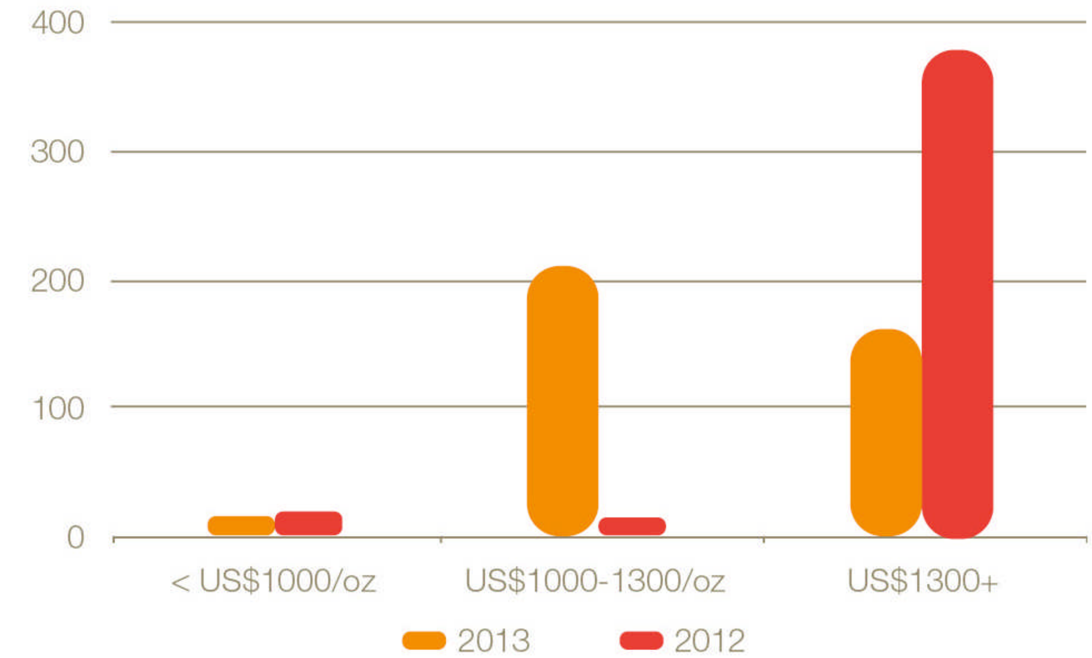
	Production (measure)	Volume change from prior year (%)	Price change from prior year (%)
Copper (million tonnes)	12	8%	(9%)
Iron Ore (million tonnes)	825	4%	6%
Coal (million tonnes)	1,470	2%	(9%)
Gold (million ounces)	25	2%	(28%)
Potash (million tonnes)	30	4%	(22%)

Source: PwC analysis

Gold reserves were realigned to the new market reality

- Falling gold prices during 2013 saw increased conservatism applied by gold miners in evaluating year-end reserves
- Gold reserves of the Top 40 fell 8%, to 431 million oz.
- The highest price assumption fell from US$1,500/oz to US$1,350/oz, with the lowest at $950/oz.

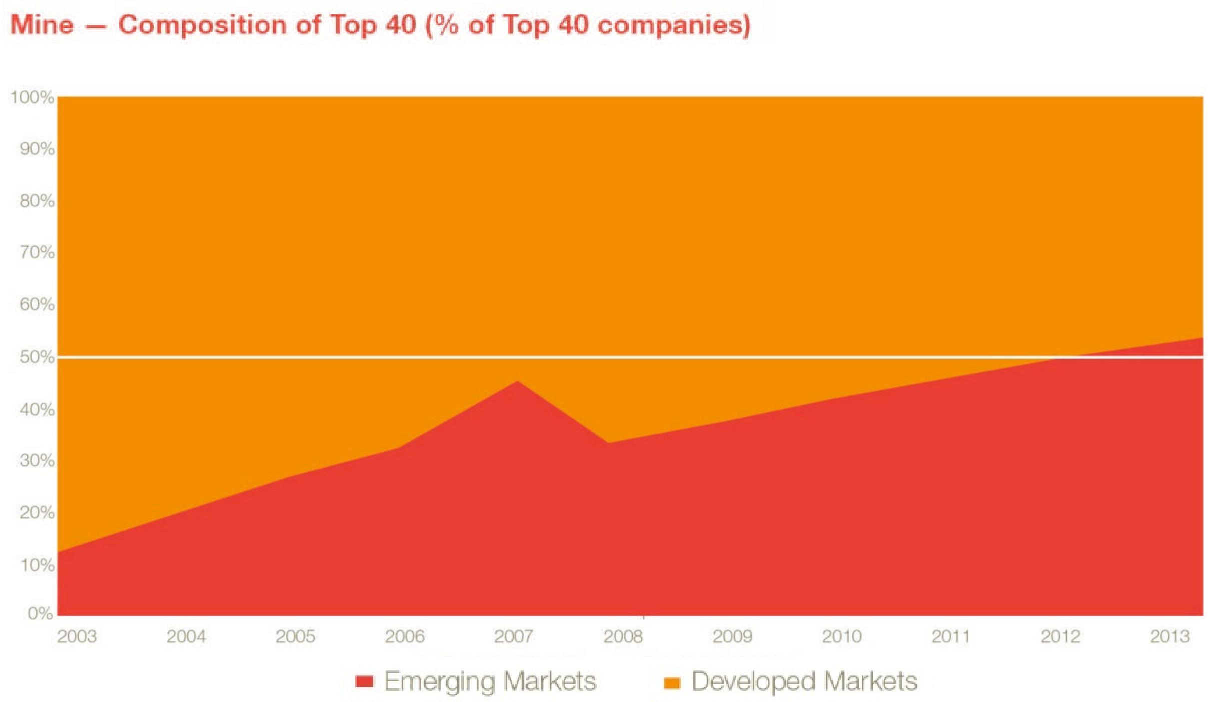
Top 40 Proportion of Gold Reserves by price assumption (million ounces)



Source: PwC analysis

The continuing rise of emerging market miners, now accounting for more than half of the Top 40…

- Emerging market companies now account for more than half of the Top 40
- Collectively emerging market miners netted $24bn in profits, compared with $4bn in losses from developed market peers
- Diversifieds continue to dominate market capitalisation of the Top 40, accounting for 51% of the total



Source: PwC analysis

Two new faces in the Top 40 field in 2013…

Saudi Arabian Mining and ALROSA both joined the Top 40 for the first time

- Saudi Arabian Mining is the first ever company from the Middle East in the Top 40, backed by a government mandate to develop Saudi Arabia's mineral resources
- Russian diamond miner, ALROSA, joined as a result of an IPO in 2013, one of the few major companies to list during the year

Impacted by impairments and declining prices during 2013, all five companies to leave the Top 40 in 2013 were gold companies (although one gold company did re-enter)

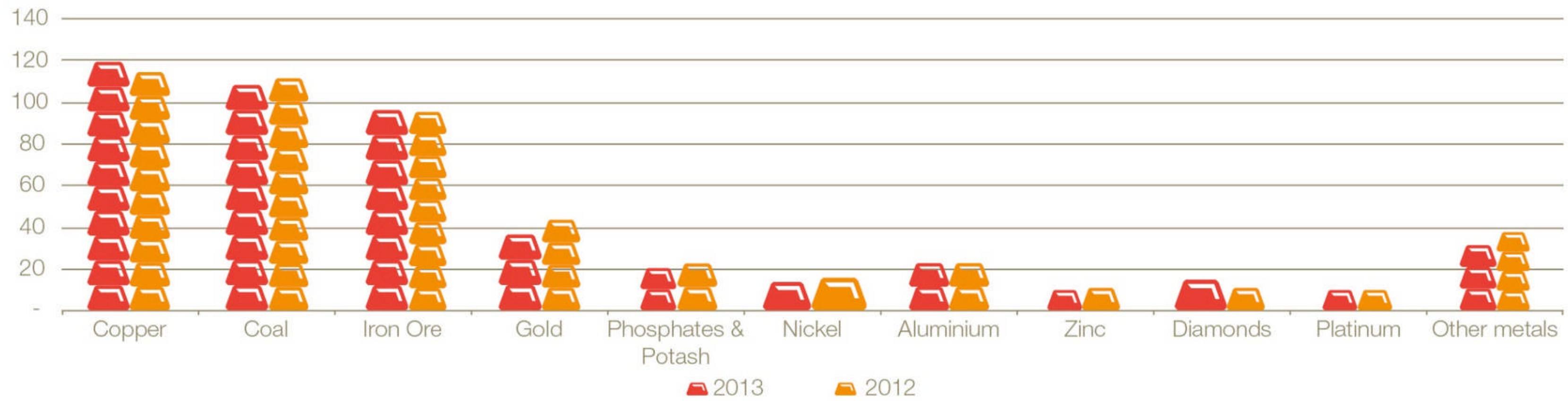
It's always darkest before the dawn...

3

Mining revenues decreased in 2013 as commodity prices fell

- The Top 40 realised a decline of 2% in mining revenues, down $13 billion to $512 billion in 2013
- Copper and iron ore revenue increased in 2013, supported by demand from emerging markets
- Emerging market factors such as China's continuing urbanisation are expected to keep demand strong

Revenue by commodity ($ billion)



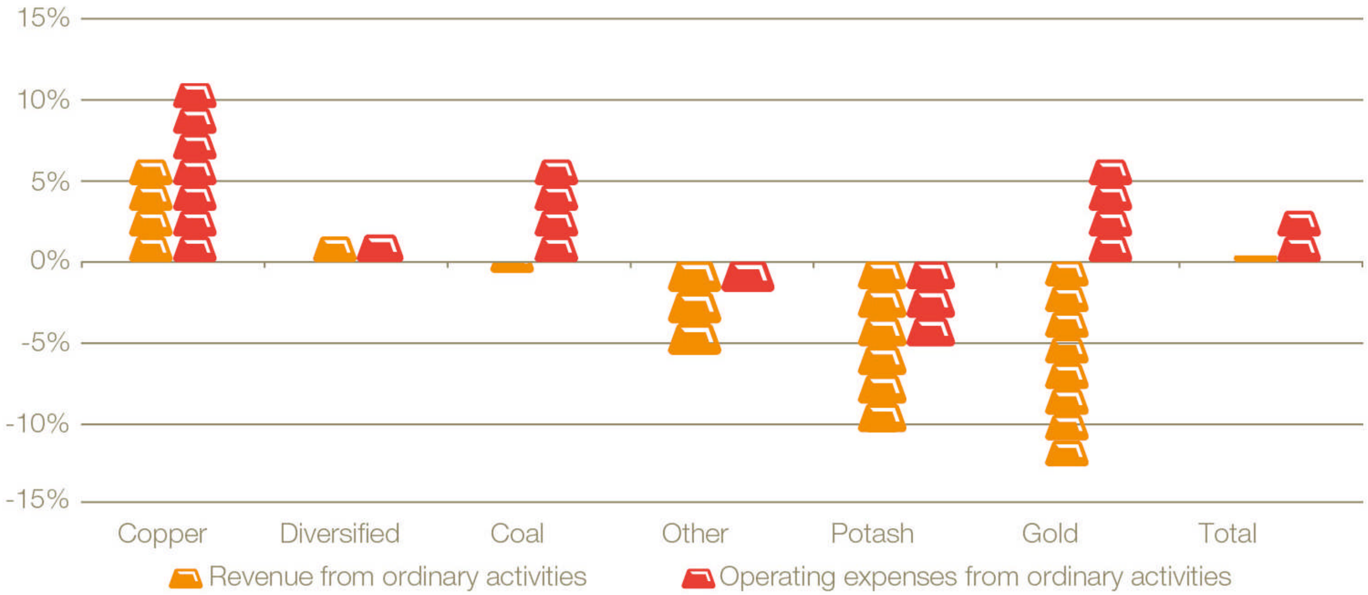
Note: Chart excludes Glencore's marketing and trading revenues, and certain other companies' non-mining revenues

Source: PwC analysis

Operating costs remained a challenge for the Top 40

- With costs up, aggregate net profits for the year dropped to $20 billion, the lowest level for the Top 40 in a decade
- Cost saving initiatives are taking time to bear fruit, but early 2014 reporting indicates some success, particularly with gold companies reporting substantial all-in cost reductions

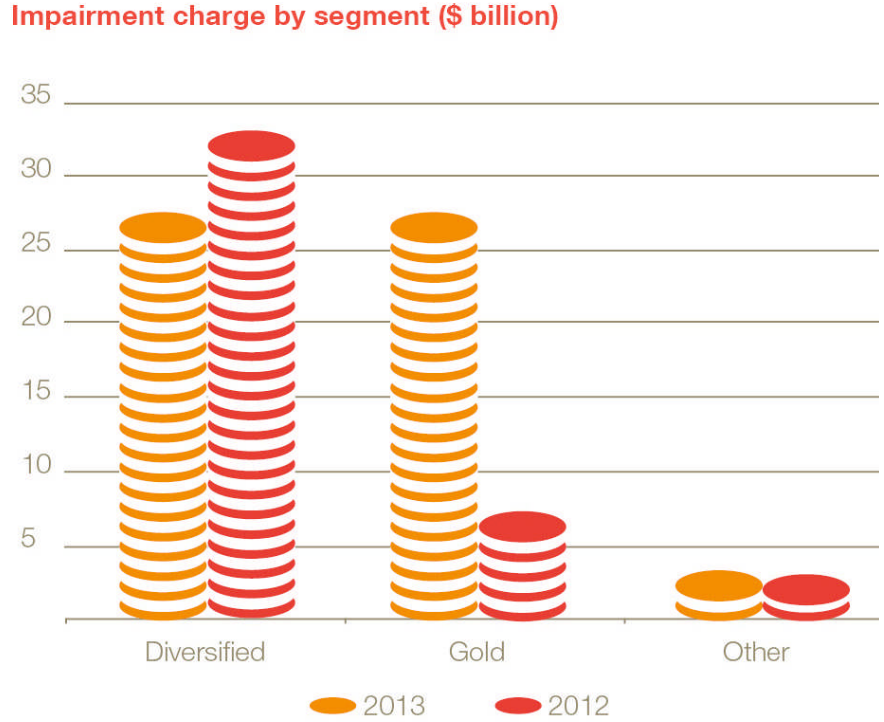
Top 40 year-on-year change in operating revenues and expenses (%)



Source: PwC analysis

Record impairments… again

- 2013 was another year of write downs for the Top 40 with $57 billion of impairment charges recorded in the year, on top of $40 billion in 2012
- One quarter of the Top 40 recorded over $1 billion of impairments each in 2013, primarily gold miners and the Top 5 diversifieds

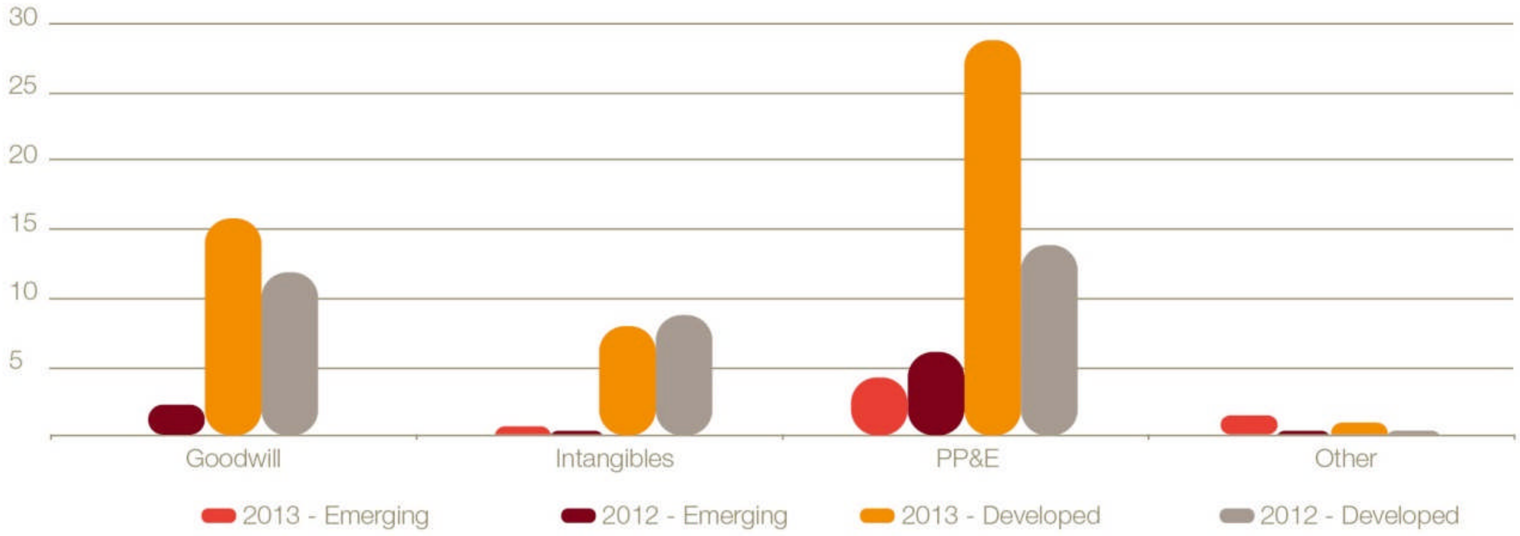


Source: PwC analysis

Record impairments… again

- A higher proportion of impairment charges were recorded against hard assets such as PP&E in 2013, reflecting the Top 40's generally lowered outlook on commodity prices, and the fact that large impairments against goodwill and intangibles had been taken in the prior year
- Emerging market companies were seemingly less impacted by impairments in 2012 and 2013, perhaps due to different M&A strategies

Analysis of impairment charge allocation ($ billion)

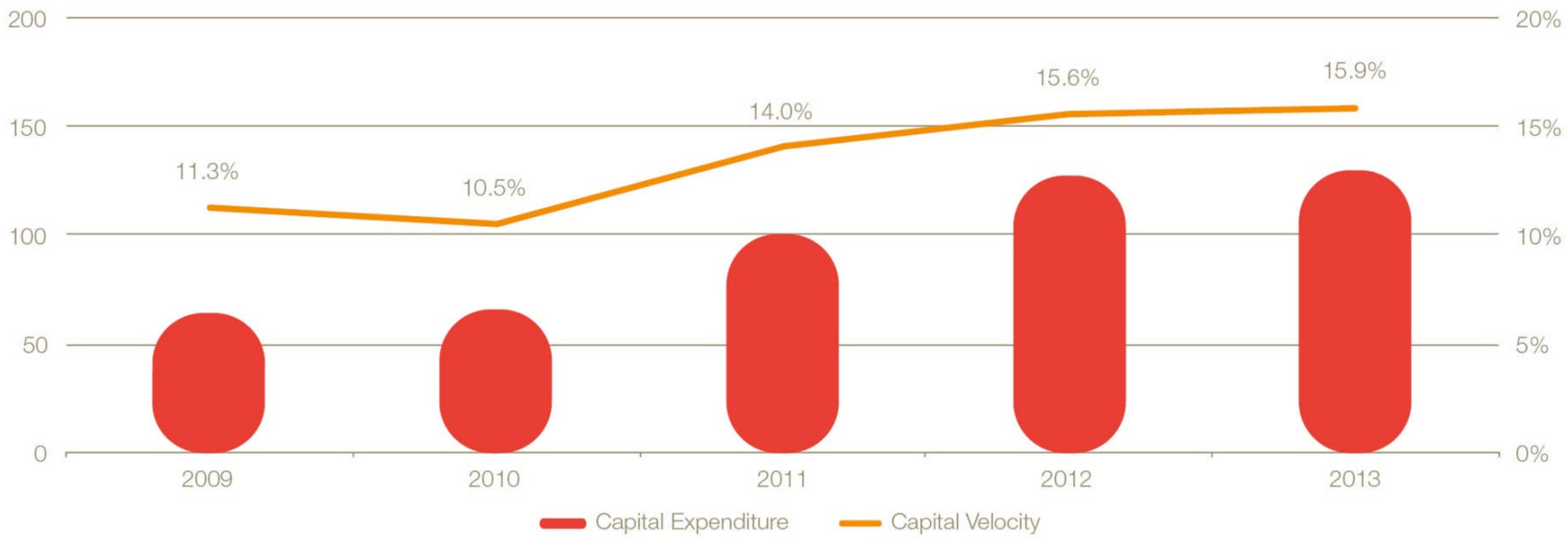


Source: PwC analysis

Capital velocity slows

- Capital velocity, the ratio of capital expenditure to capital employed, and a proxy for measuring the growth agenda of organisations in capital intensive industries, has been increasing since 2010, but slowed in 2013
- Capital discipline measures are showing, as the flattening of the ratio indicates a more considered and deliberate approach to capital allocation

Top 40 Capital Velocity (%) compared to Capital Expenditure ($ billion)



Source: PwC analysis

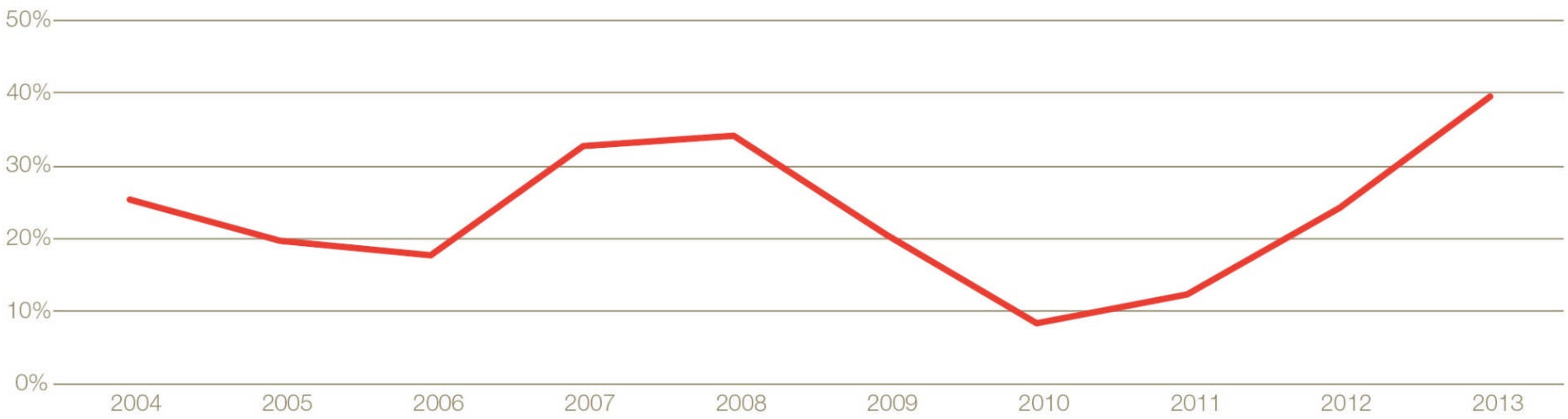
Geared for the future

4

Gearing continues to go up…

- Net debt increased 42% in 2013 as the Top 40 accessed debt and extended their repayment profiles
- Rating agency concerns for the industry in the short-term around weak operating and financial metrics, and the expectation finance costs can only increase will put pressure on the Top 40's ability to raise cheap debt

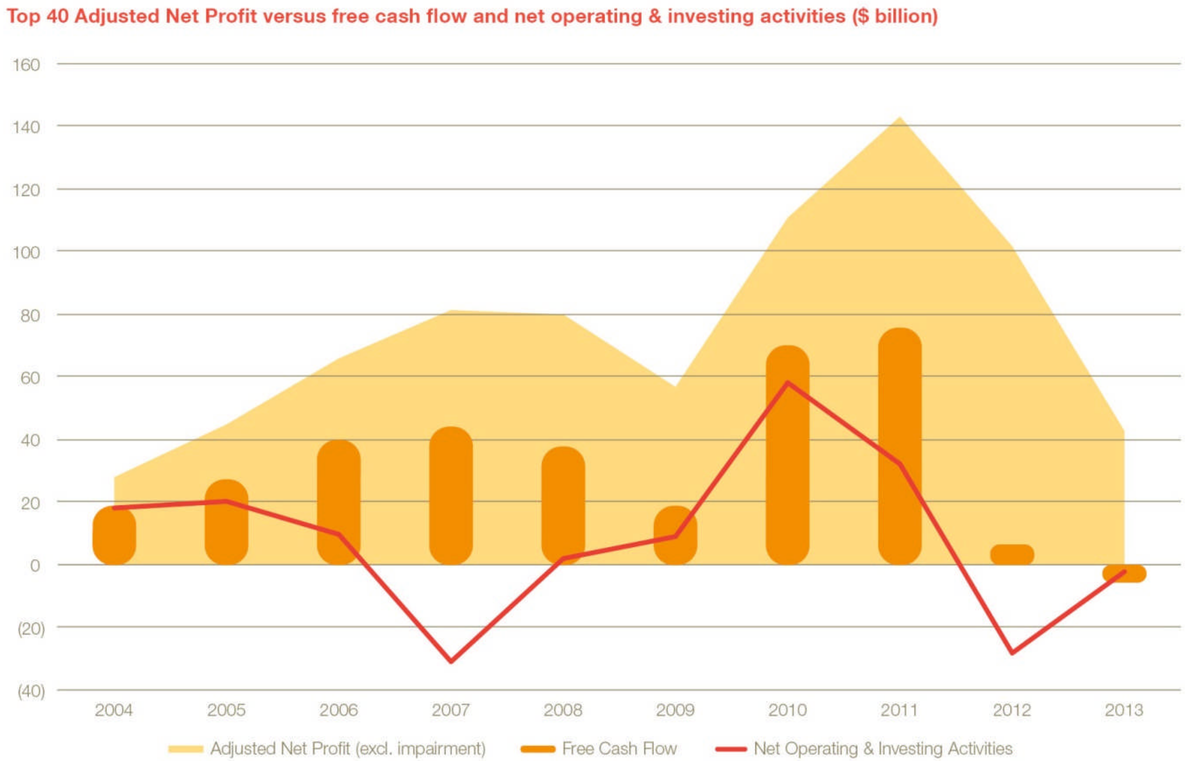
Top 40 gearing ratio (%)



Source: PwC analysis

A struggle to reduce committed capital expenditure as operating cash flows eroded

- Negative free cash flow of ($6 billion) for the first time in the *Mine* series
- Net operating cash flows were down 7% or by $10 billion as a result of squeezed operating margins
- The Top 40 struggled to reduce property, plant and equipment spend, up 2% on 2012

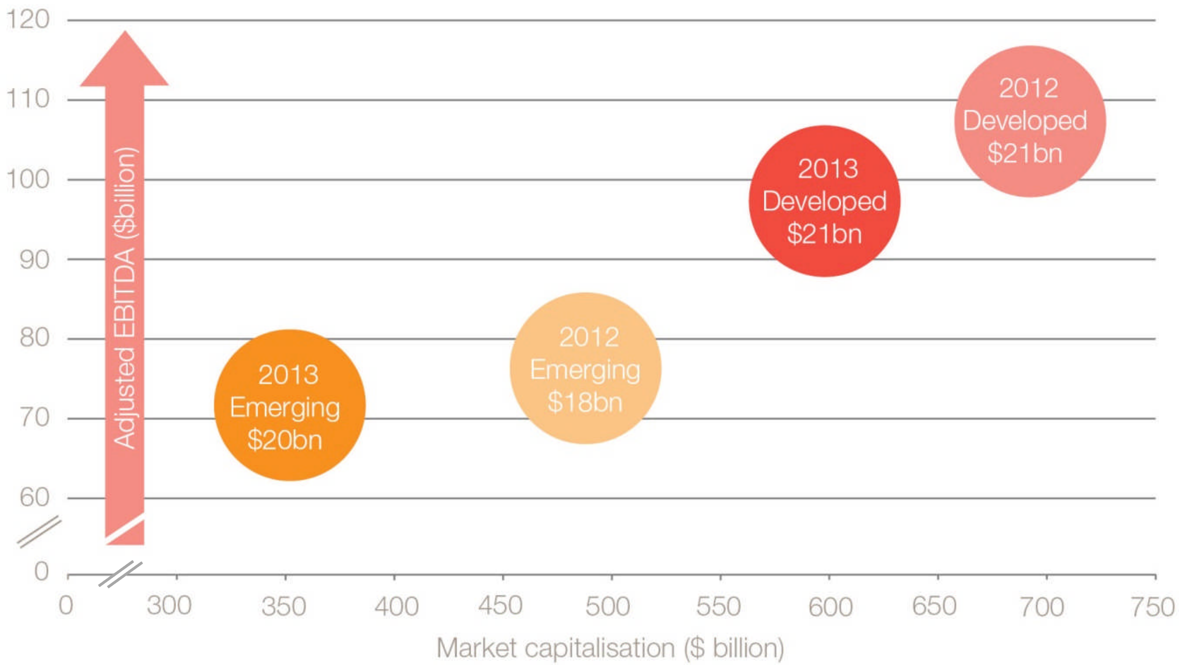


Source: PwC analysis

Yet dividends maintained regardless of results?

- Despite the difficult year, the industry continued to increase dividends paid, at $41 billion, up 5% on 2012
- Even after removing the impact of impairments, the dividend yield at December 2013 from emerging market companies significantly exceeded their developed market peers

Top 40 dividends ($ billion)



Source: PwC analysis

Strategies to beat the downturn

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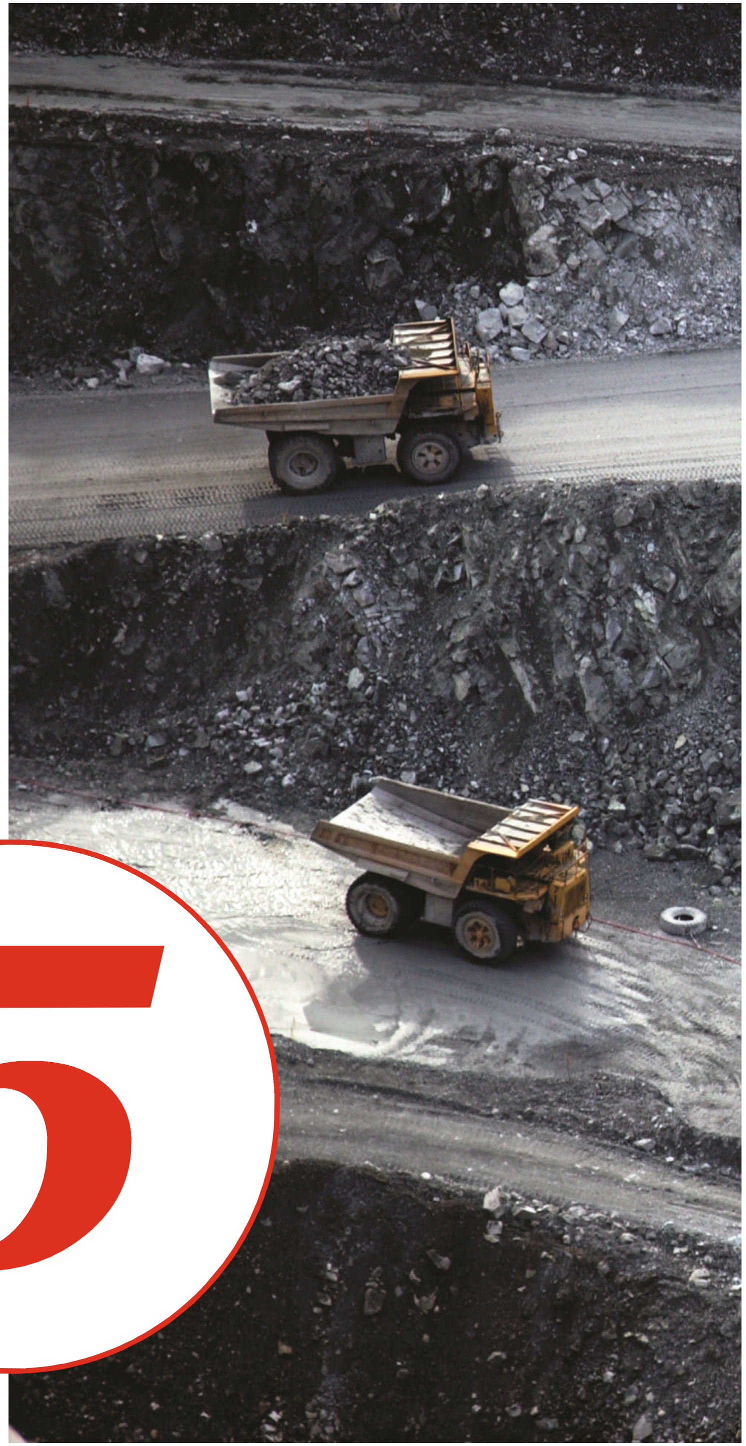
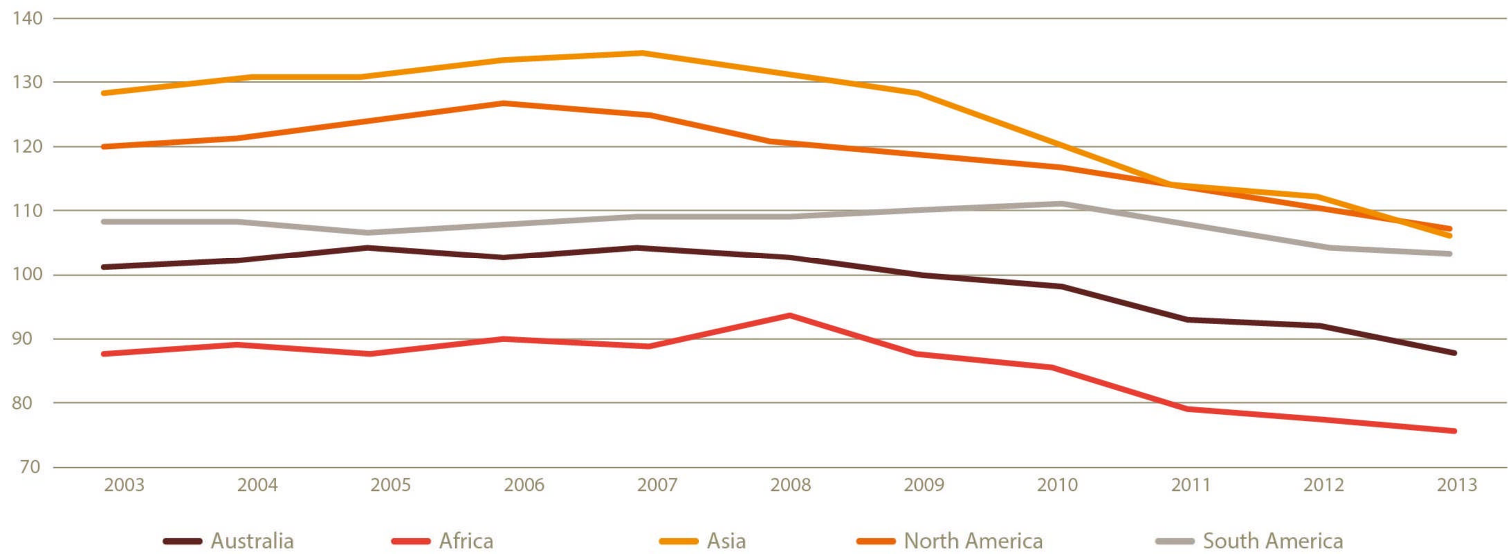


The productivity imperative – rejecting the short-term mindset

- PwC's Mining Equipment Productivity Index shows despite recent cost reduction initiatives, equipment efficiency continues to decrease globally
- Productivity remains one of the most important topics as the industry aims to restore and sustain shareholder value

PwC's Mining Equipment Productivity Index by region (MEPI)



Source: PwC's Equipment Productivity and Reliability Database

The productivity levers

1. **Determining a clear operating strategy, which is typically one of:**
    - Volume strategy – favoured during periods of high commodity prices, sees higher truck usage to minimise loader idle time, or
    - Cost strategy – a high focus on costs generally means fewer, and more highly utilised, trucks and higher levels of loader idle time

2. **Data**
    - Use of available data is a key feature of mines that achieve outstanding equipment performance, but the industry is yet to fully leverage its data

3. **People**
    - The full potential of a clear mine strategy and sound data management will not be achieved without the right people or skills

The need to realise sustainable productivity gains will be paramount to reaching the goal of having mines for all stages of the cycle

Realigning portfolio management

- With changes in CEOs and continued margin pressure, flexing where and what to mine, and what to put on hold is a focus to deliver shareholder value
- Almost a quarter of the Top 40 are diversifying geographically with a similar number either divesting non-core assets, or looking to do so in 2014

Innovative mining practices

- Innovation can help the industry enhance profitability and productivity, address labour shortages and costs and develop technologies required in more difficult conditions (e.g. declining grades, remote locations, deep mining)

- Typically much of the innovation comes from suppliers to the industry, with only nine mining companies included in a recent survey of the world's top 2,000 companies by R&D investment

- Studying 'big data' and understanding variables such as truck and process plant activity, and analysing maintenance planning and scheduling has reportedly resulted in substantial efficiencies for Rio Tinto and BHP Billiton

- Other areas of innovation being reported include replacing some drill and blast activities with new reef-boring technology for gold companies, greater adoption of driverless trucks to lessen downtime and improve safety, and assessing benefits from new engine and fuel mixes

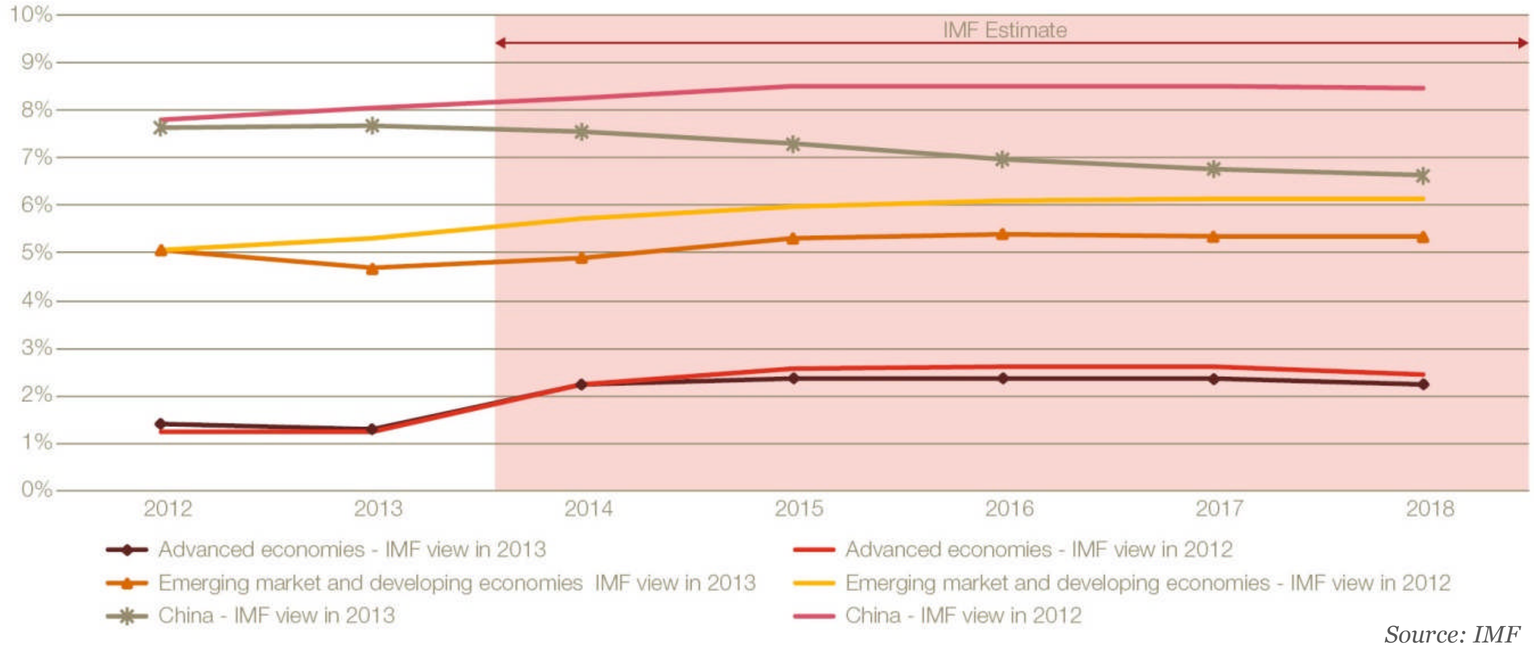
Outlook

6

Long-term demand fundamentals from emerging markets continue to provide hope

- Emerging markets continue to be the world's growth engine, with China leading the way with an envious growth rate of 6.8% by 2018
- Growth rates in developed markets are also expected to increase beyond 2014 as confidence is restored in the broader economy

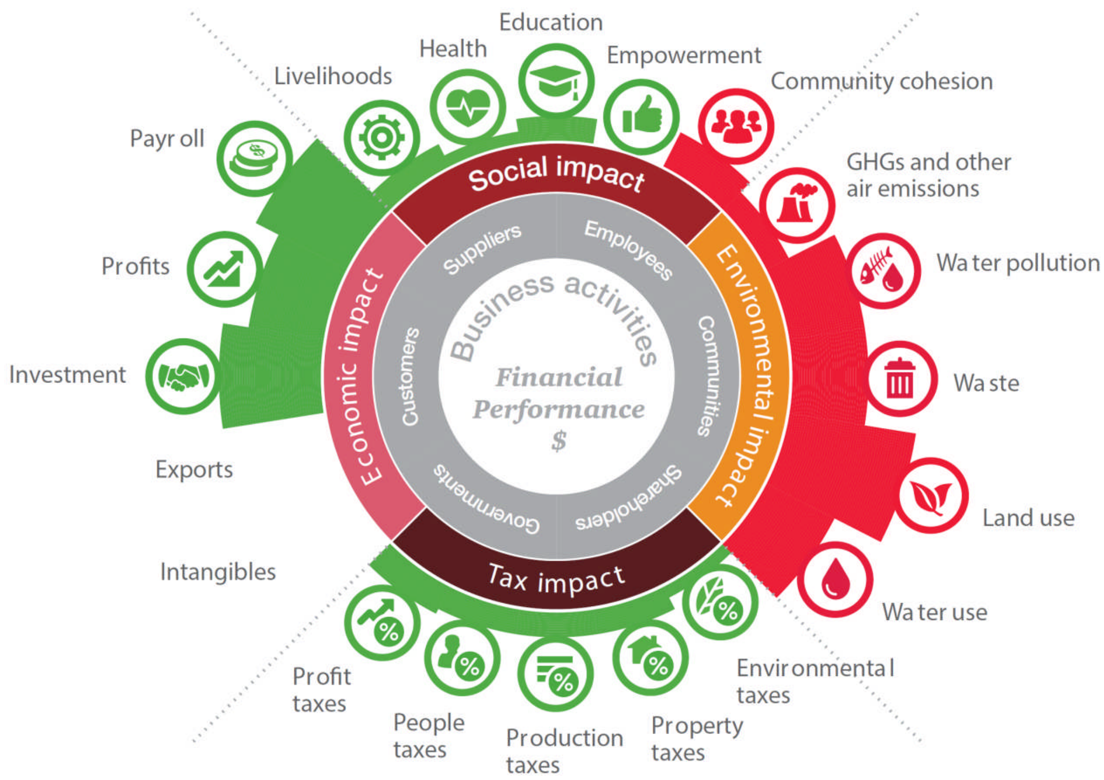
GDP growth year on year (%)



Source: IMF

Difficulties with licence to operate will continue

- Resource nationalism is here to stay. Unintended outcomes can result, actually decreasing the benefits mining brings to communities
- 2014 election results in Brazil, India, Indonesia and South Africa may alter expectations
- Carefully managing total impact can be used to build trust with local stakeholders



Delivering against realigned expectations

- Revised strategies have been put in motion and the market will grow impatient for demonstrable returns in 2014 from the strategies adopted by the Top 40
- Emerging market mining companies, some backed by governments and focused on meeting domestic supply needs, may see opportunities to get in at a relative low point for the industry
- We expect to see some moves towards consolidation – friendly or otherwise – if only to seek out synergies to reduce costs in this low price environment, consistent with the new mantra of lower costs and higher productivity

2014 will see if the renewed strategies of the mining industry can successfully lift the industry of the bottom by delivering sustainable growth…

Q&A

www.pwc.com/mining