



Mining through the cycle: exchange performance comparison

**3Q16 mergers, acquisitions
and capital raising trends**

01

M&A and capital raising trends in mining and metals 3Q16

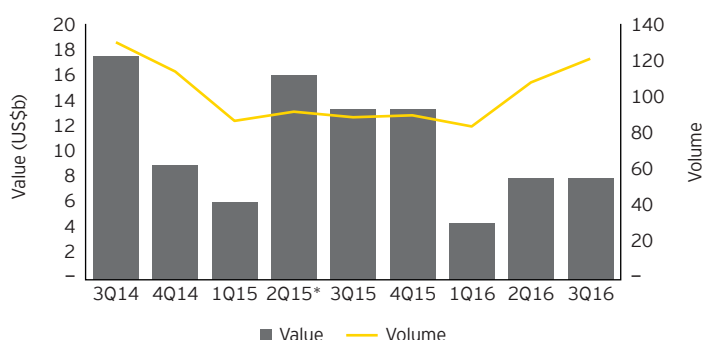


M&A and capital raising activity remained lacklustre in 3Q16, indicating that transaction activity will continue its overall four-year-long downward trend in 2016.

M&A trends

With some improvement in commodity prices and broader market sentiment, there was a modest increase in M&A activity during 3Q16. Deal value was flat at US\$7.9b but volume was up 12% to 121 deals compared to 2Q16. However, overall value in the first nine months of the year remains down, retreating 43% year-on-year.

M&A value and volume (3Q14-3Q16)



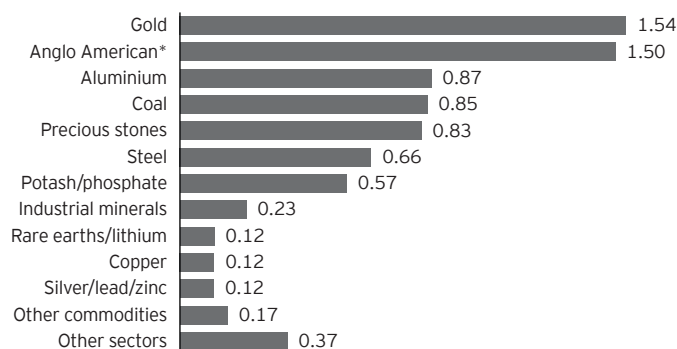
*Includes the BHP Billiton US\$8.7b demerger

Most traditional industry acquirers are still focused on portfolio realignment rather than acquisitions for future growth. Divestments continued during the quarter, with Rio Tinto and Alpha Natural Resources completing disposals and Anglo American drawing closer to the sale of Australian coal assets. While gold is perpetually the most targeted commodity by volume (over one third of all deals in 3Q16), the highest value deal this quarter was the completion of Anglo American's sale of its niobium and phosphates assets to China Molybdenum for almost US\$1.5b. China was the highest value dealmaker, being the target of US\$2.4b (29%) and acquirer of US\$3.8b (48%) worth of deals. Canada was the most prolific as the target of 29 (24%) and acquirer of 37 (31%) deals.

There are several high-value mergers on the horizon, including that between Potash Corp. of Saskatchewan and Agrium,¹ and the restructuring deal between Baosteel Group and Wuhan Iron & Steel Group.² Other companies that are expected to sell assets as part of portfolio realignment programs in coming months include MMG³ and Freeport-McMoRan.⁴ We also expect to see greater vertical integration and possibly diversification deals as smaller companies seek other opportunities – up, down and even outside of their existing value chain.

1. "Agrium and PotashCorp to combine in merger of equals to create a world-class integrated global supplier of crop inputs," *Agrium and PotashCorp press release*, 12 September 2016.
2. "China's Baosteel, Wuhan to merge to create largest steelmaker," *The Australian*, 22 September 2016.
3. "Goldman Sachs advising MMG on Golden Grove," *The Australian*, 8 September 2016.
4. "Freeport's deleveraging continues," *Mining Journal*, 13 September 2016.

Value of deals by target commodity 3Q16 (US\$b)

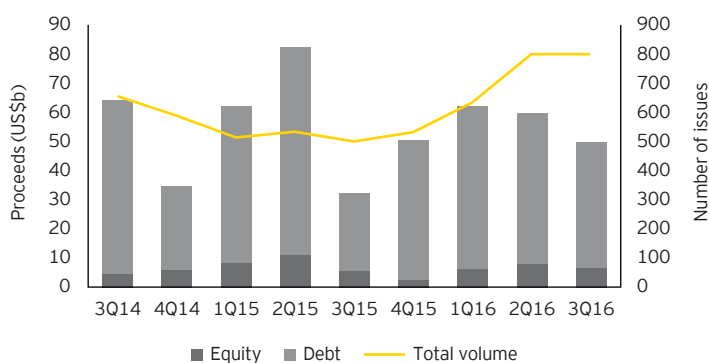


*Anglo American's niobium and phosphate divestment

Capital raising trends

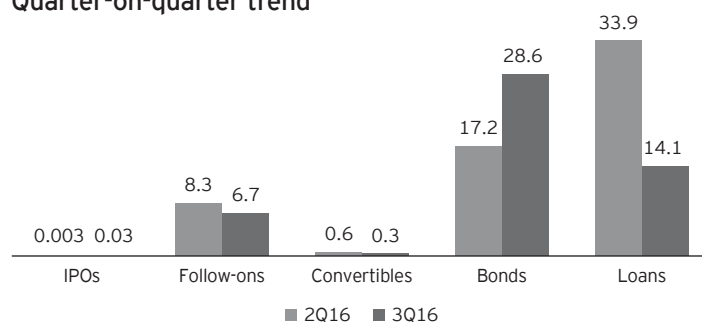
The total amount of capital raised across the sector has been in steady decline since 2013 and, at this point in the year, it appears the trend will extend. Total capital raised was US\$49.9b in 3Q16, down 17% from US\$60b in 2Q16. Capital raised was also down 3% to US\$172.2 in the first nine months of the year, compared to the same period in 2015. This doesn't necessarily reflect worsening conditions in the sector as the decline could indicate an improvement in commodity prices over the last two quarters, which has eased the need for refinancing.

Capital raised – value and volume (3Q14-3Q16)



Consistent with trends in recent years, there has been relatively little capital raised via equity markets, representing just 14% of total proceeds. The vast majority were follow-on issuances, with the major exchanges still seemingly closed for IPOs across the sector. The largest portion of new capital raised was via loans and bonds. The most significant issues during the quarter were over US\$1b of new bonds placed, each by Glencore, Vale and Shenhua Group. China raised the most significant level of proceeds during 3Q16, totaling US\$21.1b (42%).

Capital raised by asset class – proceeds (US\$b). Quarter-on-quarter trend



The outlook remains very challenging for equity markets, with no sign of change in investor sentiment on the horizon. This will restrict growth capital to debt markets, alternative forms of finance (such as streaming, offtake and pre-pays) and private capital. With the industry generally benefiting from some recovery in commodity prices during Q316, the picture is an improving one. But, we believe there is still a long way to go before we see a return of significant risk capital to the sector.



Global mining and metals exchange comparison across the cycle

About the peer comparison platform

The peer comparison platform (PCP) incorporates all mining and metals companies with a market value of more than US\$20m and a primary listing on the following exchanges: Australian Securities Exchange (ASX); Johannesburg Stock Exchange (JSE); London Stock Exchange (LSE) – Main Market; LSE – Alternative Investment Market (AIM); New York Stock Exchange (NYSE); Toronto Stock Exchange (TSX); and TSX – Venture Exchange (TSX-V). The data is sourced from S&P Capital IQ and SNL Financial.

Comparative trends on the global exchanges

EY has developed an interactive platform, the PCP, to help mining and metal companies to be compared against their peers across a wide range of financial measures. The unique feature of this platform is that every listed mining and metals company with a market capitalization over US\$20m has been categorized by the commodity produced, operating region and stage of production.

In addition, by grouping the companies by the destination of primary listing, the platform creates a comparison of the relative performance of the exchanges.

This paper illustrates the types of analyses that can be instantly produced using the PCP when used as an exchange selection tool, and highlights several interesting findings when you compare the relative performance of the exchanges between 2007 and 2015.

Primary listings destination

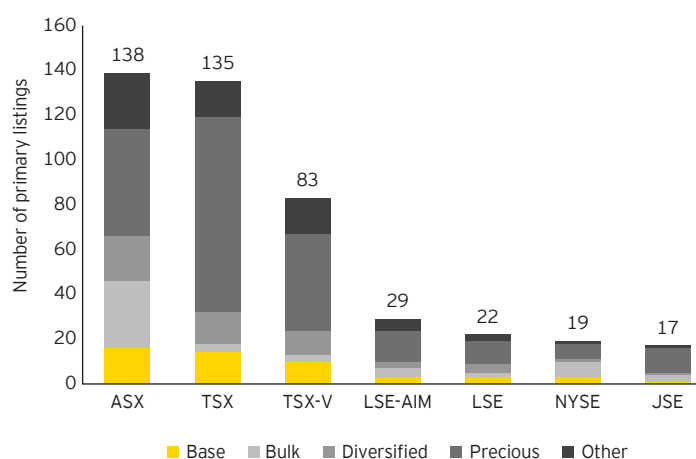
The ASX and TSX dominate as the primary listing destinations of choice, with 31% and 30%, respectively, of the total primary listings. This may be due to both investors' familiarity with mining and metal companies and the proximity of the investors to the assets. The weighting of primary listings by commodity groups⁵ are relatively evenly spread among the exchanges with the exception of the following:

- **Bulk metals:** With 30 (57%) primary listings on the ASX, the large majority of these companies produce iron ore and coal in Australia and, therefore, geographically the ASX is a logical

choice. However, among the limited number of North American and European companies listed on the ASX, almost all companies produce coal, which indicates a strong understanding of the commodity within the Australian investment community.

- **Precious metals:** With 59% of primary listings on the TSX and TSX-V, the majority (72%) of these companies' country of origin is in North or South America and, therefore, have chosen to list on the closest mining and metals-focused exchange.

Primary listings by commodity group

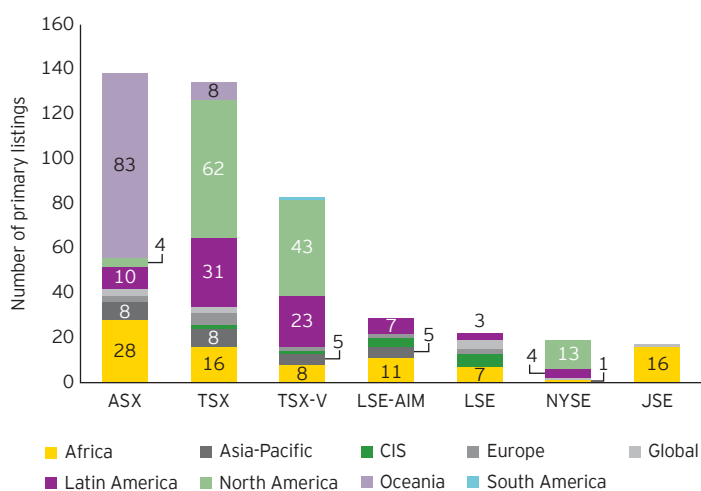


5. Categorization based on primary commodity focus, with diversified companies included separately.

One of the primary determinants of exchange selection can be the country of origin of the company listings. The TSX, TSX-V and NYSE are favored by North and South American companies, while the ASX is favored by Oceania-based companies. However, the exchange selection of companies based in Africa and Asia-Pacific is more diverse.

African-based exploration companies generally have a primary listing on the TSX-V, TSX or ASX. The Canadian exchanges usually attract a high proportion of retail investors, who are more willing to finance early exploration companies if they have management teams with a past track record. This contrasts with other mid-market exchanges, such as the LSE, which have a higher proportion of institutional investors who prefer companies with a stronger track record, albeit the AIM exchange is focused on earlier stage operations.

Primary listings by country of origin

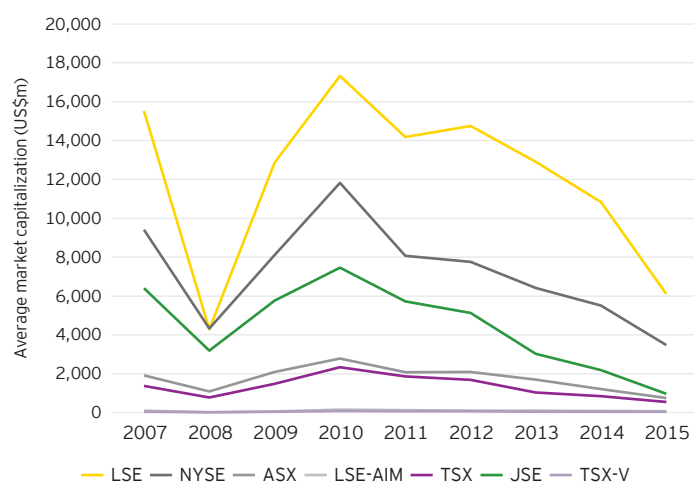
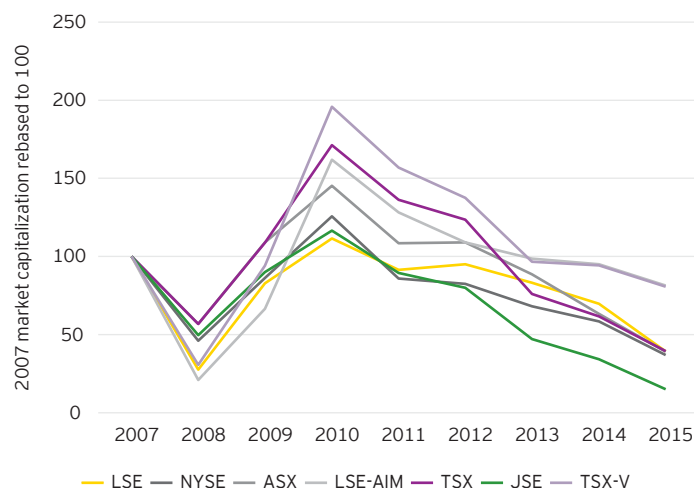


Impact of the global financial crisis and commodity price crash on the exchanges

The trend in average market capitalization for mining and metals companies between 2007 and 2015 is consistent among all the exchanges; they have been heavily impacted by the global financial crisis of 2008 and steadily declining post-2010 as commodity markets softened on the back of falling Chinese demand growth. Interestingly,

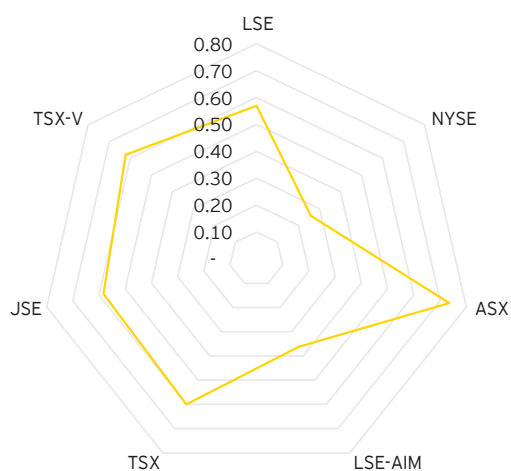
while the LSE maintained its position as the exchange with the highest market capitalization, the exchanges that have outperformed on a relative basis are the TSX-V and LSE-AIM, down by just 19% against 2007 levels, compared with the JSE (down by 85%) and all other exchanges (down by around 61%).

Average market capitalization



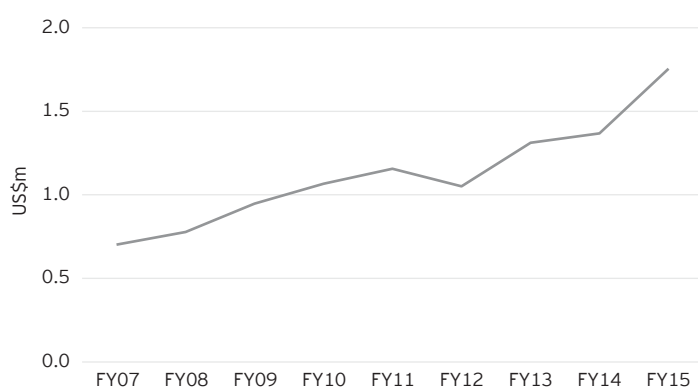
Mining and metals stocks make up a large proportion of the total traded volumes of several of the exchanges, leading to a high correlation between the performance of the mining and metals companies and the exchange as a whole, with the ASX in particular being highly correlated with the performance of its mining and metals constituent stocks.

Correlation coefficient between mining and metals companies and the average market capitalization of all exchanges between 2007 and 2015



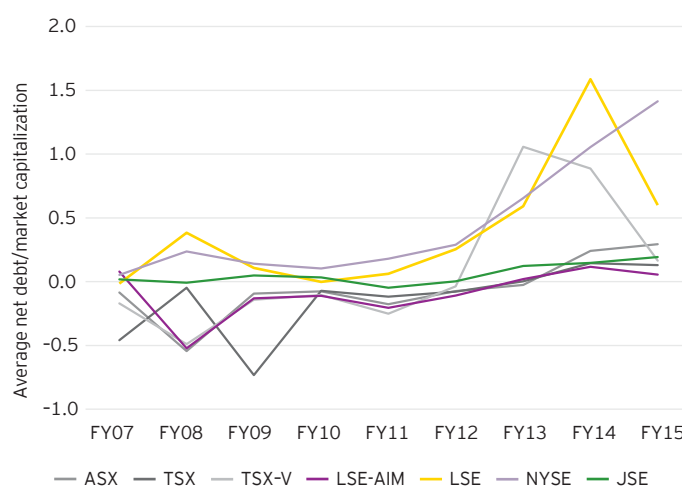
Perhaps most interestingly, the market shocks of the past eight years have not led to a reduction in liquidity, with the average daily trading volumes of mining and metals stocks increasing every year except FY2012, demonstrating continued investor focus on the sector.

Average daily trading volumes on all seven exchanges



Relative financial performance and position

The decline in earnings across the sector post-2010 has led to a widespread increase in leverage, along with an inevitable fall in market capitalization. On average, across the exchanges, the net debt to market capitalization ratio increased from 0.2:1 (i.e., a net cash position) in FY2007 to 0.4:1 in FY2014. While market capitalization continued to decline in FY2015, actions taken by companies to reduce net debt through slashing capital expenditure, cost-cutting initiatives and divestment of non-core assets reduced the average ratio to 0.3:1.

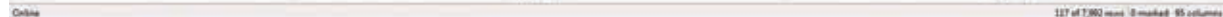


Conclusion

The ASX and TSX are the destinations of choice for mining and metal primary listings, with familiarity and proximity generally driving the exchange decision. Interestingly, while the average market capitalization of the exchanges has been heavily

impacted by the softening of the commodity market, the liquidity of the exchanges has continued to rise demonstrating continued investor focus on the sector.

The PCP has been developed as a platform to enable comparison with a company's peer group, according to primary commodity focus, geography of operations, market capitalization and development stage. The tool can be used as a sector comparison tool and an exchange selection tool.



How EY's Global Mining & Metals Network can help your business

With a volatile outlook for the sector, the global mining and metals industry is focused on how to maintain a strong and flexible balance sheet while preparing for future growth. The sector is also faced with the increased challenges of improving productivity, access to capital, dealing with increased transparency, maintaining license to operate and cybersecurity.

EY's Global Mining & Metals Network is where people and ideas come together to help mining and metals companies meet the issues of today and anticipate those of tomorrow by developing solutions to meet these challenges. It brings together a worldwide team of professionals to help you succeed – a team with deep technical experience in providing assurance, tax, transactions and advisory services to the mining and metals sector. Ultimately it enables us to help you meet your goals and compete more effectively.

EY area contacts

EY Global Mining & Metals Leader

Miguel Zweig
Tel: +55 11 2573 3363
miguel.zweig@br.ey.com

Oceania

Scott Grimley
Tel: +61 3 9655 2509
scott.grimley@au.ey.com

China and Mongolia

Peter Markey
Tel: +86 21 2228 2616
peter.markey@cn.ey.com

Japan

Andrew Cowell
Tel: +81 3 3503 3435
cowell-ndrw@shinnihon.or.jp

Africa

Wickus Botha
Tel: +27 11 772 3386
wickus.botha@za.ey.com

Commonwealth of Independent States

Boris Yatsenko
Tel: +7 495 755 98 60
boris.yatsenko@ru.ey.com

France, Luxembourg, Maghreb, MENA

Christian Mion
Tel: +33 1 46 93 65 47
christian.mion@fr.ey.com

India

Anjani Agrawal
Tel: +91 22 6192 0150
anjani.agrawal@in.ey.com

United Kingdom & Ireland

Lee Downham
Tel: +44 20 7951 2178
ldownham@uk.ey.com

Canada

Bruce Sprague
Tel: +1 604 891 8415
bruce.f.sprague@ca.ey.com

Brazil

Afonso Sartorio
Tel: +55 11 2573 3074
afonso.sartorio@br.ey.com

Chile

María Javiera Contreras
Tel: +56 2 676 1492
maria.javiera.contreras@cl.ey.com

Service line contacts

EY Global Advisory Leader

Paul Mitchell
Tel: +61 2 9248 5110
paul.mitchell@au.ey.com

EY Global Assurance Leader

Alexei Ivanov
Tel: +7 495 228 36 61
alexei.ivanov@ru.ey.com

EY Global IFRS Leader

Tracey Waring
Tel: +61 3 9288 8638
tracey.waring@au.ey.com

EY Global Tax Leader

Andrew van Dinter
Tel: +61 3 8650 7589
andrew.van.dinter@au.ey.com

EY Global Transactions Leader

Lee Downham
Tel: +44 20 7951 2178
ldownham@uk.ey.com

EY | Assurance | Tax | Transactions | Advisory

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

© 2016 EYGM Limited.
All Rights Reserved.

EYG no. 03382-164Gbl

BMC Agency
GA 0442_08106

ED None

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

ey.com/miningmetals