Industries
Energy, Utilities & Mining

Mining Deals*

2007 Annual Review

Mergers and acquisitions activity in the mining industry

*connectedthinking

PricewaterhouseCoopers

Contents

Methodology

Mining Deals 2007 is based on published transactions from the Dealogic 'M&A Global' database, December 2007. Analysis encompasses announced deals, including those pending financial and legal closure and those which are completed. Deal values are the consideration value announced or reported including any assumption of debt and liabilities. Figures relate to actual stake purchased and are not multiplied up to 100%. The geographical split of the deals refers to the location of the purchased asset(s). Where this is not clearly identified or relates to multiple geographical regions, the deal region is stated based on the location of the target company. The analysis relates to the extractive mining sector and therefore excludes related sectors such as the steel industry and metals trading sectors. The sector and subsectors analysed include: precious metals (e.g. gold, silver, platinum), base metals (e.g. iron ore, nickel, copper, aluminium), diversified (companies with a wide range of mining activities across subsectors) and other (includes coal, uranium, mineral sands, mining services). A full list of transactions throughout 2007 is available by visiting the *Mining Deals* website at www.pwc.com/mining.

Introduction 01

The mining industry is experiencing an unprecedented period of change driven by M&A activity that is running at record highs at all levels of the sector. The very biggest companies are positioning themselves to achieve super-consolidated global scale. They face considerable competition from fast-growing companies emerging from India, Russia and China. The industry landscape is set to change dramatically. These changes are accompanying consolidation among all sizes of company and, in some parts of the world, vertical integration moves by metals and power companies are also shaping the sector.

Mining Deals 2007 reviews deal activity in the mining industry. The report is a new companion publication to PricewaterhouseCoopers' well established *Power Deals* and *O&G Deals* reports. Together the trio provides a comprehensive analysis of M&A activity across the extractive and power industries worldwide.

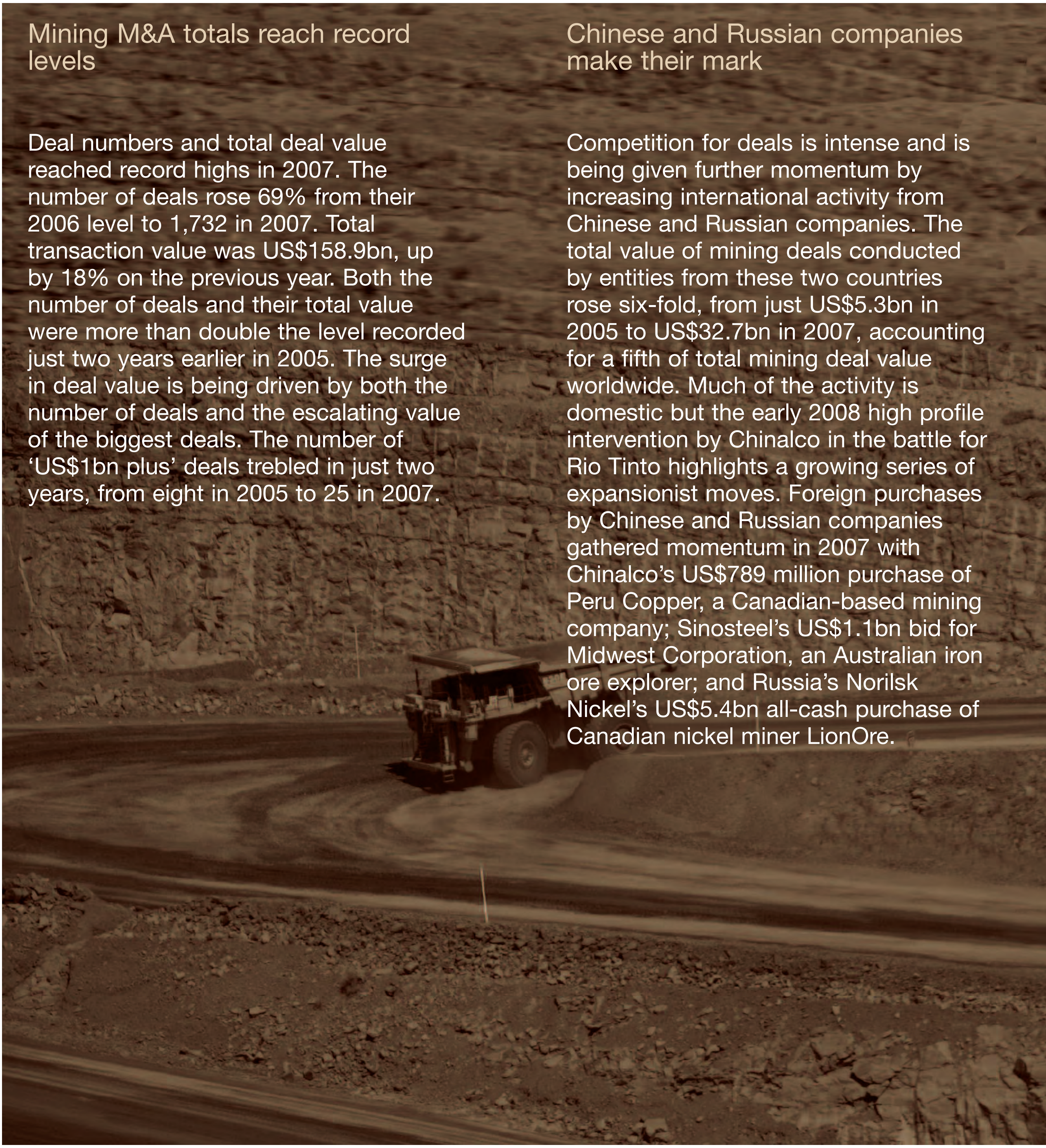
We examine both the rationale behind the overall trends and look at the key individual deals. We look at the year under review, the context of the preceding two years, and ahead to the future direction of deal-making in the sector. We also highlight, in a series of deal dialogues throughout the report, some of the critical issues for companies engaging in deal activity within the sector. Drawing on our global experience as an adviser to mining industry M&A players, our commentary addresses all key markets in the sector.

Looking ahead, we examine the effect of a more uncertain economic outlook on deal-making in the sector. We look at the imperatives that will continue to underpin activity as well as the factors that will inhibit deal-making. Our conclusion is that mining deal activity is set to remain strong. Whatever its size, no company will be able to be complacent about their M&A strategies as the industry continues to chart a dynamic M&A path.

Tim Goldsmith

Tim Goldsmith
Global Mining Leader

02 Report highlights



Mining M&A totals reach record levels

Deal numbers and total deal value reached record highs in 2007. The number of deals rose 69% from their 2006 level to 1,732 in 2007. Total transaction value was US$158.9bn, up by 18% on the previous year. Both the number of deals and their total value were more than double the level recorded just two years earlier in 2005. The surge in deal value is being driven by both the number of deals and the escalating value of the biggest deals. The number of 'US$1bn plus' deals trebled in just two years, from eight in 2005 to 25 in 2007.

Chinese and Russian companies make their mark

Competition for deals is intense and is being given further momentum by increasing international activity from Chinese and Russian companies. The total value of mining deals conducted by entities from these two countries rose six-fold, from just US$5.3bn in 2005 to US$32.7bn in 2007, accounting for a fifth of total mining deal value worldwide. Much of the activity is domestic but the early 2008 high profile intervention by Chinalco in the battle for Rio Tinto highlights a growing series of expansionist moves. Foreign purchases by Chinese and Russian companies gathered momentum in 2007 with Chinalco's US$789 million purchase of Peru Copper, a Canadian-based mining company; Sinosteel's US$1.1bn bid for Midwest Corporation, an Australian iron ore explorer; and Russia's Norilsk Nickel's US$5.4bn all-cash purchase of Canadian nickel miner LionOre.

‘Eat or be eaten’ becomes the new reality

The mining sector is in a phase of major structural change, with consolidation in the mid-tier and among smaller companies and the emergence of super-majors among the biggest diversified companies. Upstream integration moves by companies in industries such as metals, particularly steel, and power are also on the increase. Mining companies cannot afford to be bystanders in M&A activity. Deals are a key mechanism for filling the pipeline of development projects, bringing forward new development projects and diversifying corporate portfolios in terms of both commodities and geography.

The era of super-consolidation arrives

In 2007, Rio Tinto set a new top deal bar with its US$43bn purchase of Alcan and its substantial mining assets. 2008 looks set to see mining deals reach very high record levels as super-consolidation takes place in the market. Early in 2008, BHP Billiton announced a takeover offer for Rio Tinto with a potential deal value over the US$150bn mark that would shatter all previous records. The era of super-consolidation is also being further evidenced by rumours of a Vale bid for Xstrata in a deal that could be worth US$90bn.

04 Deal totals

Deal activity in the mining industry is running at unprecedented high levels. Total deal value reached a new high in 2007 with transactions worth US$158.9bn, up by 18% on the previous year and more than double the total value recorded just two years earlier (Figure 1). Consolidation, both in the pursuit of a diversified mining base and to achieve scale, is a key deal driving force with further momentum being added by the growing importance of Russian and Chinese companies.

The surge in deal value is being driven by both the number of deals and the escalating value of the biggest deals. Deal numbers rose 69% to 1,732 in 2007 – more than double their 2005 level. The intensity and extent of deal activity is evidenced by the strong upward trend of deal numbers among mining companies of all sizes (Figure 2). Over 90% of all deals involved transactions of US$250 million or less and the number of such deals doubled from 2005 to 2007. At the other end of the scale, there has also been a growing number of US$1bn plus deals. Indeed, the number of US$1bn plus deals trebled in just two years, from eight in 2005 to 25 in 2007.

At the very top of the scale, the trend towards mega-deals in the mining sector has become firmly established. Each year is bringing yet bigger top deal values. In 2005, the biggest deal was Inco's US$13.8bn move for Falconbridge. In 2006, it was Freeport-McMoran's US$25.8bn purchase of Phelps Dodge. In 2007, Rio Tinto set a new top deal bar with its US$43bn swoop for Alcan and its substantial aluminium assets. The year 2008 looks set to see mining deals reach new mega-mega deal levels as super-consolidation takes place in the market. BHP Billiton began the year bidding to takeover Rio Tinto with a potential deal value over the US$150bn mark that would shatter all previous records. Such a deal would offer considerable synergies from combining the two companies' west Australian iron ore operations but would, of course, be subject to competition clearance. The era of super-consolidation is also being further evidenced by rumours that Vale will bid for Xstrata in a deal that could be worth US$90bn.

Figure 1: **Total mining deals, 2005-2007 (year on year % change in paranthesis)**

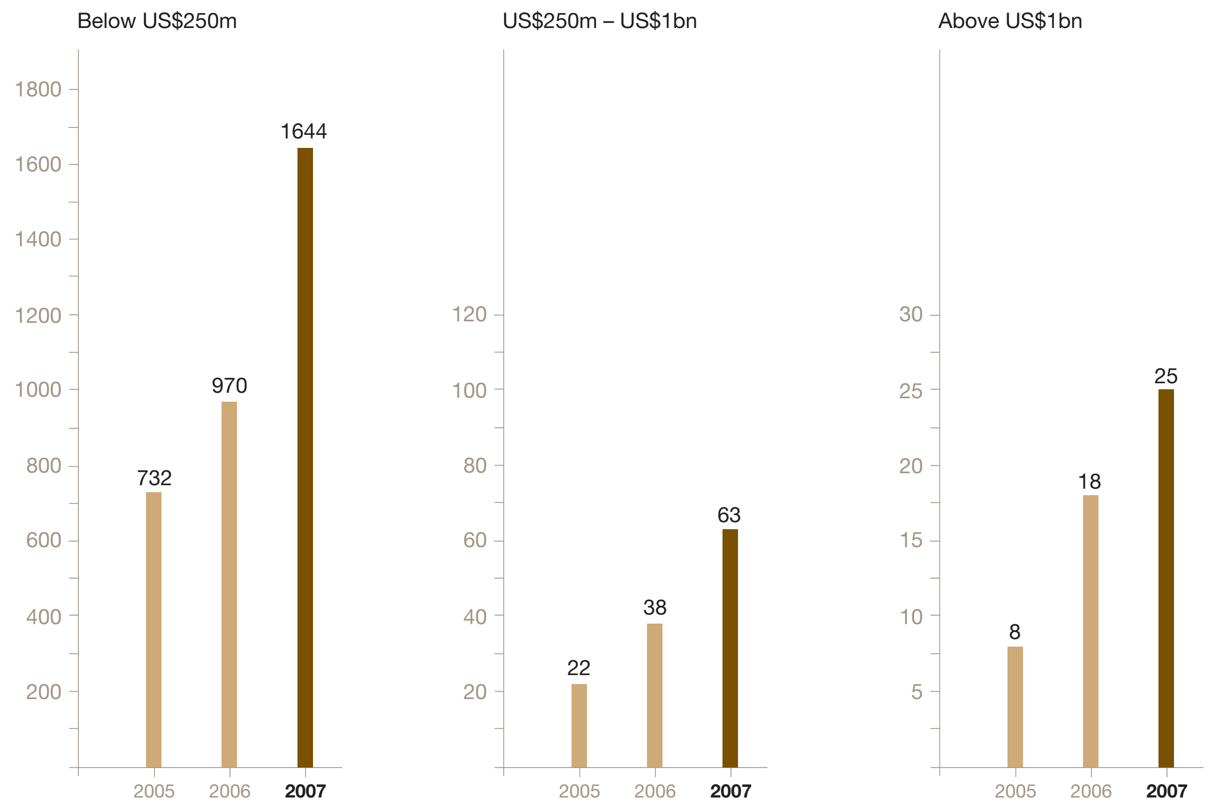
	2005	2006	**2007**
Total number of deals	762	1026 (+35%)	**1732 (+69%)**
Total value of deals	US$69.8bn	US$133.9bn (+92%)	**US$158.9bn (+18%)**
Average value (based on deals where value is reported)	US$125.6m	US$196.6m (+58%)	**US$137.5m (-30%)**

Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

Underpinning these trends is the quest for world scale, resource acquisition and resource diversification. High commodity prices, buoyant market capitalisations and optimism about the industry's long-term growth and profitability, with sustained demand in Asia outstripping fluctuations in western demand, have seen mining companies embarking on ambitious long-term growth strategies. Alongside this, companies from down the supply chain, particularly in the steel sector, and state-owned enterprises are making significant moves to acquire mining assets. This combination of forces from both within and outside the immediate sector is creating huge buying power that is fuelling M&A demand.

M&A is being used to gain greater diversification by the biggest players and to acquire resources to meet demand by all players. With less recent exploration, resource pipelines need filling. At the same time, exploration costs are at all-time highs, permitting is taking longer and companies also face skills' shortages. These are significant barriers to meeting what is a major upturn in world demand. With companies sitting on big cash positions, M&A is an important way of overcoming these challenges. In addition, it is key to enabling companies to diversify portfolios, both across geographies and commodities.

Figure 2: **Size of mining deals by value, 2005-2007**

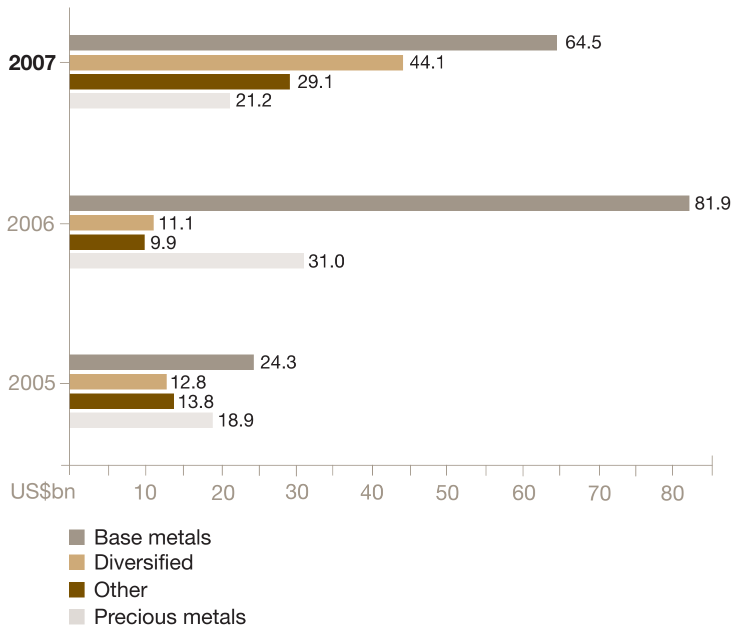


Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

06 Deal totals

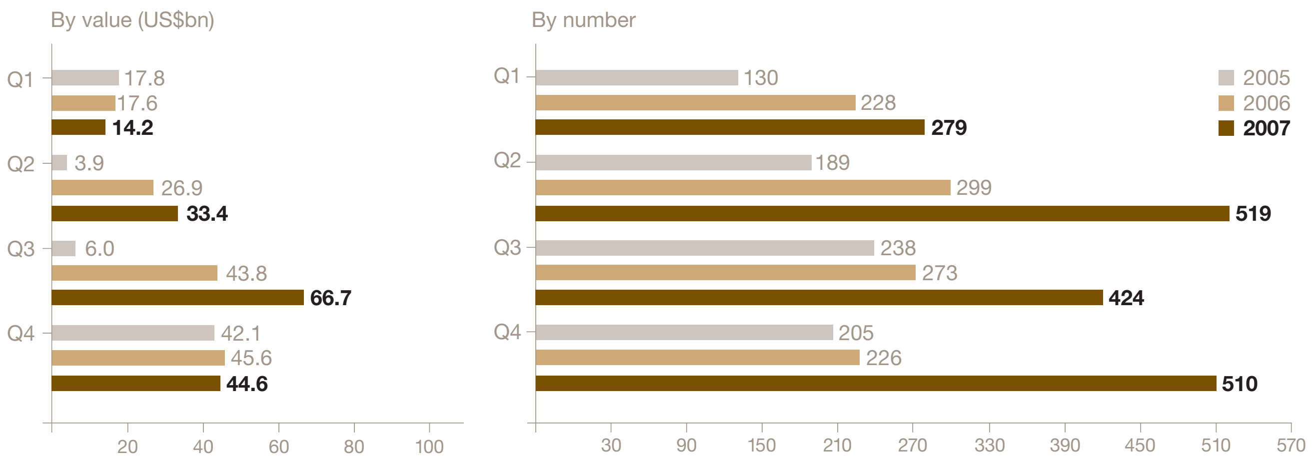
The mining sector is in a phase of major structural change, with consolidation in the mid-tier and among smaller companies and the emergence of super-majors among the biggest diversified companies. These trends are reflected in the pattern of M&A activity within the industry with the major growth in deal activity coming from the base metals, diversified and other sectors (including coal, uranium and mineral sands) and less dramatic changes coming in the precious metals sector where a different set of economic metrics apply (Figure 3). There was little evidence of a slowdown in deal activity as a result of the credit crunch. Indeed the number of mining deals announced in the fourth quarter of 2007 was more than double the level recorded in the corresponding quarter of 2006 (Figure 4).

Figure 3: **Analysis of mining sector by value (US$bn), 2005-2007**



Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

Figure 4: **Quarterly tracking of mining deals by value (US$bn) and number of deals, 2005-2007**



Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

Deal makers

2007's table-topping US$43bn successful bid by Rio Tinto for Alcan was the first move in a wave of super-consolidation that is taking place within the mining industry. The deal was quickly followed up in 2008 with a bid by BHP Billiton for Rio Tinto that could prove to be four times as large as the Rio/Alcan deal. The prospect of a BHP Billiton/Rio colossus, in turn, prompted China's state-owned mining company, Chinalco, to weigh in with US$14bn-worth of stake-building in Rio Tinto in a joint exercise with Alcoa. Alongside these moves, Brazilian group, Vale, and Anglo-Swiss mining company, Xstrata are rumoured to be in talks that could lead to a deal worth around US$90bn.

These heavyweight manoeuvres by leading players in the mining and metals industries reflect the trends discussed in the previous chapter. The moves also reflect the strong position that leading mining companies are in due to high commodity prices. The Rio Tinto Group was reported as saying that it would pay for the Alcan deal with its cash pile and bank debt and that high commodity prices meant that it was generating US$1bn of cash each month (Financial Times, 11 July 2007). The purchase was principally designed to gain significant aluminium operations for Rio Tinto and, indeed, it quickly signalled its intention to explore options for divesting non-core assets, including the engineered products and packaging parts of the former Alcan, while retaining its bauxite, alumina and primary metal smelting assets.

Considerable deal volume is coming from companies in Russia and China, including the second and third largest deals in 2007 (Figure 5). The total value of mining deals conducted by entities from these two countries rose six-fold, from just US$5.3bn in 2005 to US$32.7bn in 2007, comprising a fifth of total mining deal value worldwide (Figure 6). Much of this activity is domestic in nature, again reflecting a strong trend to consolidation which, in the case of the second largest deal of 2007 – Rusal's US$13.3bn investment for a 25% stake in Norilsk Nickel – could produce giants to rival the likes of BHP Billiton and Rio Tinto.

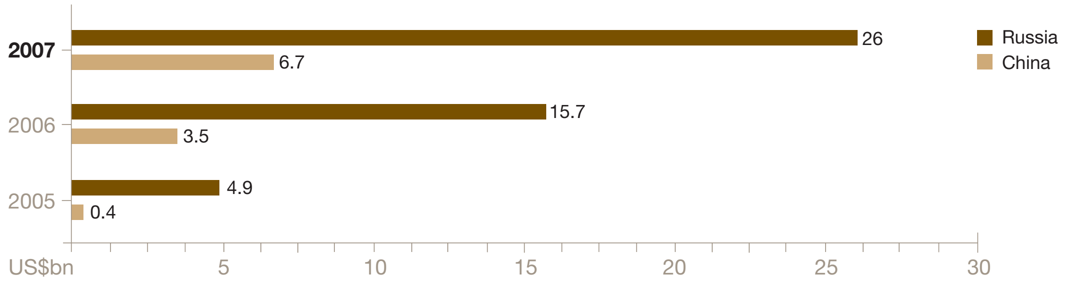
Figure 5: **Top Ten – mining deals 2007**

No.	Value of transaction (US$m)	Date announced	Buyers	Sellers	Primary Continent
1	42,957	11 Jul 07	Rio Tinto plc	Alcan Inc	North America
2	13,272	23 Nov 07	UC Rusal	Norilsk Nickel OAO (25%)	Russian Federation
3	5,447	03 May 07	Norilsk Nickel OAO	LionOre Mining International Ltd	North America
4	3,862	03 Jul 07	Teck Cominco Ltd	Aur Resources Inc	North America
5	3,410	28 Jun 07	Yamana Gold Inc	Meridian Gold Inc	North America
6	2,888	12 Feb 07	SXR Uranium One Inc	UrAsia Energy Ltd	Asia Pacific
7	2,872	29 Oct 07	Xstrata plc	Jubilee Mines NL	Asia Pacific
8	2,716	07 Feb 07	BHP Billiton Ltd & plc	BHP Billiton Ltd & plc (4.03%)	Asia Pacific
9	2,665	05 Oct 07	Market Purchase	AngloGold Ashanti Ltd (22.028%)	Africa
10	2,366	15 Jun 07	AREVA SA	UraMin Inc (94.5%)	Africa

Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007,* based on published transactions from the Dealogic 'M&A Global' database, December 2007

Increasingly, there have also been significant international moves by Russian and Chinese companies. The high profile intervention by Chinalco in the battle for Rio Tinto is the most headline-grabbing of a series of moves by Chinese companies that began in 2005 with China Minmetals' unsuccessful quest to buy Canada's Noranda, at the time the world's third largest zinc and ninth largest copper producer. Since then, however, Chinese and Russian companies have been making smaller value but, nonetheless, very significant purchases. These have included US$796 million worth of stake-building in Anglo American in 2006 by China Vision Resources, an investment vehicle of Larry Yung, one of China's richest men; Chinalco's US$789 million purchase of Peru Copper, a Canadian-based mining company, completed in July 2007; China Minmetals and Jiangxi Copper's agreed US$450 million cash bid for Canadian-listed company Northern Peru Copper in December 2007; Sinosteel's 2007 US$1.1bn bid for Midwest Corporation, an Australian iron ore explorer; and Russia's Norilsk Nickel's US$5.4bn all-cash purchase of Canadian nickel miner LionOre in 2007. Anglo-Swiss mining company Xstrata had missed out in the competition to acquire LionOre. Later in 2007, it secured Australian nickel miner Jubilee's agreement to a US$2.9bn cash takeover.

Figure 6: **Deal making by Russian and Chinese entities, 2005-2007**
(Total value of deals by acquirer nation)

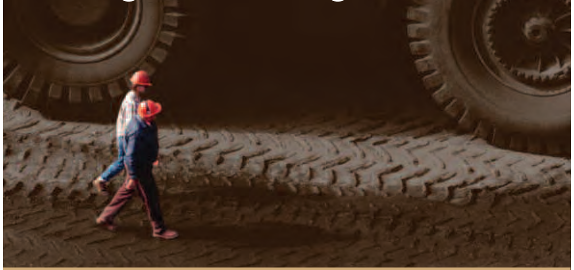


Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

A significant number of deals in the top ten mining deals table of 2007 featured consolidation moves among Canadian and US mining companies. These are discussed in more detail in the North American section on page 12. Elsewhere in the top ten table, UK-based mining company, Anglo American, sold a 22% stake in South African-based gold producer, AngloGold Ashanti Ltd, to institutional investors for US$2.7bn as part of a move by the mining group to balance its portfolio by reducing its reliance on gold. During 2007, Anglo American struck various deals to increase its iron ore mining assets. The remaining deal in the top ten table of 2007 was the first US$2.7bn instalment in a series of share buy-backs by BHP Billiton, reflecting confidence in the company's cash position and market outlook.

In large part, private equity buyers are not so active in the mining sector as in other sectors. The risk-reward equation in the mining industry limits the scope for using debt and the need for specialist mining expertise prohibits the additional management value that can be injected. Nonetheless, US-based private equity investment firm Apollo Management acquired the Noranda Aluminium Assets from Xstrata in a deal worth US$1.15bn. The assets came to Xstrata as part of its US$20.2bn acquisition of Canada's Falconbridge in 2006. The purchase was Apollo's first move into metals.

Mining deal dialogue:



Cash is king from a tax perspective in Australia

International competition for Australian mining assets has reached record levels. An added incentive has come from the introduction of tax consolidations in Australia in 2001. Today, when acquisitions are structured appropriately, the tax consolidation rules provide good tax opportunities for the acquirers, with the cost of the transaction effectively being reflected in the tax cost base of the underlying assets of the acquired entities. This has often led to a big step-up in tax values of these assets, meaning the acquirers can benefit from significantly higher tax depreciation deductions than those being claimed prior to the acquisition.

However, one of the last acts of the departing John Howard Liberal Government was to issue a press release that threatened to take away this beneficial 'cost base resetting' for certain scrip for scrip deals. The new Government has recognised that this has created considerable uncertainty and significantly reduced share-based bids. However, they are yet to give clear guidance as to the status of the law in this area. This means that there is some doubt about whether purchases by shares now get the same tax outcomes as cash transactions. This element of doubt currently makes a share-based bid far less competitive than a cash bid.

This tax change, allied to the credit crunch issue, whereby cash is harder to come by, currently places those that hold significant cash balances at a definite advantage. In addition, in recent years we have seen the arrival in Australia of buyers of assets from China, India and Russia. In all instances such acquisitions have been for cash. Therefore these buyers arguably have a significant comparative advantage over a rival suitor that wishes to move forward using its shares as currency.

The PwC tax team in Australia has enabled many companies to structure their acquisitions in an optimal manner, to maximise the benefits available under the Australian tax laws, resulting in real value generation for the buyer.

10 Deal places

North America, and in particular Canada, remained the primary focus for mining deal activity in 2007 with a total deal value of US$77.1 billion. Although, overall, North American deal value dipped in 2007 compared to 2006, the number of deals more than doubled, from 310 to 695 reflecting intense competition for mining assets with a larger number of smaller transactions.

Total deal value across all territories leapt by US$64.1bn in 2006 compared to 2005 and by a further US$25bn in 2007. In 2006, North America accounted for 75% of the increase with the Russian Federation and South America providing the remainder. In 2007, however, the motor for growing total deal value switched to the Asia Pacific region where deal value grew by US$24.2bn offsetting dips in growth elsewhere. The big leap in Asia Pacific deals was fuelled by intense worldwide competition for Australian resources. Seven out of the top ten Asia Pacific deals were for Australian resources with all but two buyers coming from outside Australia. Elsewhere, increases in deal values in the Russian Federation and Africa also contributed to the overall increase in total deal value in 2007.

Figure 7a : **All mining deals by region, 2005-2007**

Europe	2005	2006	2007	% change
Value of deals (US$bn)	2.1	3.8	**1.5**	**-61.5%**
Number of deals	63	71	**67**	**-5.6%**

North America	2005	2006	2007	% change
Value of deals (US$bn)	36.2	83.2	**77.1**	**-7.3%**
Number of deals	225	310	**695**	**124.2%**

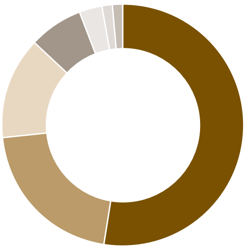
South America	2005	2006	2007	% change
Value of deals (US$bn)	1.4	8.6	**8.7**	**0.6%**
Number of deals	53	115	**174**	**51.3%**

Russian Federation	2005	2006	2007	% change
Value of deals (US$bn)	5.0	16.5	**19.1**	**15.9%**
Number of deals	38	87	**40**	**-54.0%**

Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

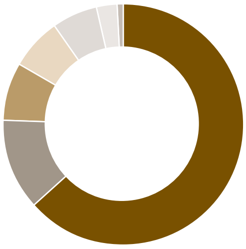
Figure 7b: **All transactions by continent by value of transactions, 2005-2007**

2005 (total US$70.2bn)



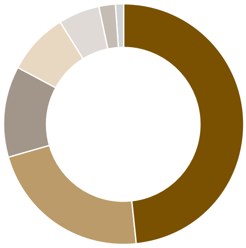
- North America **51.8%**
- Asia Pacific **21.1%**
- Africa **13.7%**
- Russian Federation **7.1%**
- Europe **2.9%**
- South America **2.0%**
- Eurasia & Middle East **1.4%**

2006 (total US$135.5bn)



- North America **62.1%**
- Russian Federation **12.3%**
- Asia Pacific **8.3%**
- Africa **7.4%**
- South America **6.4%**
- Europe **2.9%**
- Eurasia & Middle East **0.6%**

2007 (total US$158.9bn)



- North America **48.6%**
- Asia Pacific **22.2%**
- Russian Federation **12%**
- Africa **8.5%**
- South America **5.5%**
- Eurasia & Middle East **2.3%**
- Europe **0.9%**

Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

Asia Pacific	2005	2006	2007	% change
Value of deals (US$bn)	14.8	11.2	**35.3**	**216.2%**
Number of deals	298	368	**634**	**72.3%**

Africa	2005	2006	2007	% change
Value of deals (US$bn)	9.5	9.8	**13.5**	**38.1%**
Number of deals	59	52	**94**	**80.8%**

Eurasia & Middle East	2005	2006	2007	% change
Value of deals (US$bn)	0.9	0.8	**3.7**	**376.1%**
Number of deals	26	23	**28**	**21.7%**

12 Deal places: North America

Deal-making by North American mining companies continued at a very high level in 2007, even without a repeat of the clutch of mega-mergers that had characterised 2006. Canadian companies, in particular, proved attractive to foreign buyers drawn to the advantages of investing in a politically stable environment. Alongside this, there was considerable consolidation as mid-cap North American mining companies took the opportunity to scale up with a number of mutually strategic fits with counterpart companies.

The US$5.4bn purchase of LionOre by Russia's Norilsk Nickel added to a trend of foreign takeovers of Canadian mining interests, most notably, of course, Rio Tinto's purchase of Canada's largest aluminium producer, Alcan. In 2006, Inco and Falconbridge, Canada's largest nickel producers, were bought by CVRD (now Vale) and Xstrata respectively. In 2007, there were a number of major moves for North American companies by foreign bidders. As well as the Alcan and LionOre deals, two other inbound moves saw French nuclear company, Areva, purchase Canadian miner Uramin for US$2.4bn, and Rio Tinto increase its interest in Canadian mining company Ivanhoe Mines in a deal with a potential value of US$1.8bn if the Mongolian Government gives final project approval to Ivanhoe's Oyu Tolgoi project. Uramin has substantial uranium assets in Africa. Later in 2007, Areva agreed to supply 35% of Uramin's production to China's state-owned Guangdong Nuclear Power Corporation, highlighting the importance of long-term security of resource supply to China's economy.

Figure 8: **North America mining deals by sector**

	2005 By value (US$bn)	2006 By value (US$bn)	**2007** By value (US$bn)	% share
Base metals	19.2	66.1	45.5	59%
Diversified	0.9	0.9	16.8	22%
Precious metals	14.5	15.2	8.5	11%
Other	1.6	1.1	6.4	8%
Total	**US$36.2bn**	**US$83.2bn**	**US$77.1bn**	**100%**

Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

Much of the North American deal-making in 2007 took the form of mutual interest consolidations and these, together with the LionOre deal, accounted for much of the big increase in diversified deals (Figure 8). Teck Cominco's friendly US$3.9bn purchase of fellow Canadian miner Aur added considerably to the company's copper production and, in particular, to its copper reserves and resources. The deal was an example of a diversified company, Teck Cominco, taking over a company largely focused on one sector with over 90% of Aur's revenue derived from copper. Another friendly all-Canadian deal saw two uranium miners merging to create the world's second largest uranium producer with UrAsia Energy's agreement to a US$2.9bn reverse takeover by smaller rival SXR Uranium One. The deal enabled UrAsia to diversify away from an asset base that had been concentrated in Kazakhstan.

Over 90% of North American mining deal value was in the diversified, base metals and other segments of the market with deals involving gold mining companies falling off. However, a significant move in the gold sector was the three-way deal whereby Yamana Gold acquired fellow Canadian company Northern Orion Resources for US$1bn and then both companies moved for US company Meridian Gold in a US$3.4bn acquisition. The deals place Yamana Gold among the leading intermediate gold producers.

14 Deal places: Asia Pacific

Deals for Asia Pacific mining assets surged in 2007. Deal numbers were up by 72% from 368 in 2006 to 634 in 2007. Total deal value rose 216% from US$11.2bn to US$35.3bn. Numbers and total value were up in all segments of the mining industry with the biggest surge coming in the base metals and other resources categories.

There was a significant increase in the number of big deals. In 2007, there were seven US$1bn plus deals for Asia Pacific mining assets and a further eight US$0.5bn plus deals. In contrast, in 2006, there had been just two deals above US$1bn and no others above US$0.5bn. Intense competition for Australian mining assets lay behind much of the deal growth, with foreign buyers attracted by the politically stable environment and the potential to fill their resource pipelines.

Anglo-Swiss mining company Xstrata headed the list of Asia Pacific deals with its US$2.9bn purchase of Australian nickel company Jubilee Mines. The deal was one of no fewer than six moves by Xstrata during 2007 to acquire Australian mining companies. Among the other US$1bn plus foreign moves for Australian mining assets was Palmary Enterprises' US$1.2bn takeover of manganese miner Consolidated Minerals. Palmary – led by Gennadiy Bogolyubov, the Ukrainian billionaire – won a bidding competition against Pallinghurst Resources, an investment vehicle run by Brian Gilbertson, former BHP Billiton chief executive. Sinosteel's US$1.1bn bid for iron and steel feedstock company Midwest Corporation completed a trio of foreign plays for Australian mining assets.

Figure 9: **Asia Pacific mining deals by sector**

	2005 By value (US$bn)	2006 By value (US$bn)	**2007** By value (US$bn)	% share
Base metals	1.4	2.6	10.6	30%
Diversified	10.0	3.8	9.0	26%
Precious metals	1.1	1.2	3.5	10%
Other	2.2	3.6	12.2	34%
Total	**US$14.8bn**	**US$11.2bn**	**US$35.3bn**	**100%**

Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

The Sinosteel pursuit of Midwest is, as discussed earlier, just one example of major international expansion activity by Chinese companies. As shown in Figure 6, purchases by Chinese entities rose from just US$0.4bn in 2005, to US$3.5bn in 2006 and US$6.7bn in 2007 – a sixteen-fold increase in just two years. Six out of the top ten deals involving Chinese buyers were purchases of foreign assets. In addition, though, there was also considerable consolidation activity within China. Indeed, domestic deals within China comprised the vast majority of all deals by Chinese buyers. This reflects the very fragmented state of much of the mining sector within China, particularly in gold. There is a very active phase of consolidation in China with companies seeking to gain the necessary scale to compete globally. In the coal industry, there is the added imperative of government-directed safety and environmental initiatives that have necessitated smaller enterprises to scale up in order to be best placed to respond to the new requirements.

Mining deal dialogue:

Outbound China deals: maximising senior commitment and expertise post-deal

Developing the right strategies for harnessing and supplementing existing senior management skills and commitment post-deal is a challenge for all deals. It needs special care when deals are international in nature, bringing together companies with different cultures and practices or where key people in the target company have done well from deal proceeds but their continuing commitment still needs to be maximised. These challenges are even greater where there is a language barrier which can be the case, for example, with many Chinese companies making 'outbound' mining investments.

The specialist expertise and knowledge of senior management is particularly critical in the mining industry where specific experience of the mineral resource segment, deposit or location can be the difference between success and failure. Often the key people with this insight will have benefited significantly from deal proceeds. Chinese deal-makers often wish to find a way to retain and incentivise such personnel. Often, key players on both sides may be working on completing their first cross-border deal and have to adapt their day-to-day work lives and organisational behaviours to function within the framework of a larger, more fully integrated organisation.

It is very important for the acquirer to be well informed about the implications of this type of situation and begin planning for this key post-deal success factor well before the deal nears completion. Indeed, many interactions during diligence, negotiation and closing will influence the target management's decision about whether to stay post-deal, how willing they are to collaborate with the new parent, and the amount of energy they put into these post-deal efforts.

PwC is in the unique position of having perspective on the inner workings of the target's organisation from our role in due diligence work. As a key facilitator between the acquirer and target, we can assist the former in the identification of key people, provide insight into the operating practices of the target team, design effective retention/incentive schemes tailored to the specific local market, and assist with negotiating ongoing service agreements and future compensation packages.

16 Deal places: Russian Federation

A big increase in deals for diversified assets in the Russian Federation, combined with a step change in international expansion by Russian companies, put Russia firmly on the mining M&A world map in 2007. Total deal value for Russian Federation assets was up 16% to US$19.1bn in 2007 and Russian buyer activity rose 66% to account for US$26bn of assets, up from US$15.7bn in 2006.

It was the size of the biggest deals rather than the extent of deal activity that pushed up the totals. Heading the list of deals for Russian assets was Rusal's US$13.3bn acquisition of a 25% stake in Norilsk Nickel. Rusal is already one of the world's biggest aluminium producers and many commentators feel that the move is the first step in a consolidation that could deliver a Russian mining and metals giant to rival the likes of Rio Tinto and BHP Billiton. Indeed, Alexander Bulygin, Rusal chief executive, was reported as saying: "we intend to create Russia's first global diversified metals and mining company. Our company will join the ranks of the world's top five mining giants" (Financial Times, 23 November 2007). Norilsk Nickel's earlier US$5.4bn purchase of Canada's LionOre, the biggest Russian overseas acquisition, was thus perhaps just a harbinger of bigger expansion to come. Rusal itself grew significantly with its 2006 US$6.6bn acquisition of SUAL and the alumina assets of Swiss company Glencore International. It was the biggest Russian mining deal of that year and highlighted a trend towards a Russian ownership of resource assets.

Figure 10: **Russian Federation mining deals by sector**

	2005 By value (US$bn)	2006 By value (US$bn)	**2007** By value (US$bn)	% share
Base metals	2.3	8.3	0.1	0%
Diversified	0.7	3.0	14.7	77%
Precious metals	1.4	3.7	0.5	3%
Other	0.5	1.5	3.8	20%
Total	**US$5.0bn**	**US$16.5bn**	**US$19.1bn**	**100%**

Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

The second largest Russian domestic deal in 2007 was Mechel Steel's winning US$2.3bn bid in the privatisation auction for stakes in Russian coal mining companies Yakutugol and Elgaugol. The deal is the latest manifestation of a strong trend toward vertical integration in the Russian steel industry with companies keen to secure good iron ore and coking coal resources. Previously independent iron ore and coal miners have been progressively acquired by steel companies over the past four to five years. Similar vertical integration is taking place elsewhere with Gazprom, for example, on the acquisition trail for steaming coal assets. Inbound deals from foreign companies were few in number. The largest such deal was a US$40million switch of foreign ownership with South Africa gold producer, AngloGold Ashanti, agreeing to acquire Russian peer companies, Amikan and Angara Mining, from UK gold exploration company, Trans-Siberian Gold.

Mining deal dialogue:

Russian infrastructure investment: opening up a rich mining seam

Russia is one of the richest countries in terms of mineral resources. However, the production to reserves ratio is low. Most of the large base metals and precious metals deposits are in remote areas of Eastern Siberia and the eastern end of the country where severe infrastructure deficiencies exist. Some mines have lain idle for decades. Infrastructure constraints have also partially prevented foreign investments into the sector.

Changes in recent years give hope for more state investment in infrastructure. The government has used high cashflows from energy prices to build up a large stabilisation fund and announced payments to support infrastructural projects. A number have been filed by private mining companies for government financing. The remote areas, containing the most attractive mining reserves, have also been approved for massive state financing over the next 5-15 years as part of regional development programmes. Infrastructural projects are also being considered for private-public partnerships (PPPs), one of the most discussed tools to stimulate investments.

PwC is carefully monitoring the trends and has launched a PPP initiative to the market, assembling a group of experts established to facilitate such projects. The group has already completed a biofuel plant construction project. Together with our existing Project Finance group, PwC is well prepared to advise the infrastructure development market.

18 Deal places: Africa and South America

In the rest of the world, the biggest number of deals and total deal value came in Africa and South America. There were big increases in deal numbers for assets in both continents – up by 81% from 52 to 94 in Africa and 51% from 115 to 174 in South America. Africa accounted for the largest total deal value with US$13.5bn worth of deals, up by 38% from US$9.8bn in 2006. South American total deal value rose slightly from US$8.6bn in 2006 to US$8.7bn in 2007.

Four US$1bn plus deals boosted the African total deal value. The largest was Anglo American's US$2.7bn divestment of a 22% stake in South African-based gold producer, AngloGold Ashanti Ltd, to institutional investors. The second largest involving African assets was Areva's US$2.4bn purchase of Canadian-owned Uramin discussed on page 12. A US$2bn merger of London AIM-listed Nikanor and Canadian company Katanga brought together adjacent mines in the Democratic Republic of Congo and placed the merged company in a strong position to become a copper leader in Africa. The fourth US$1bn plus deal for African assets saw Xstrata acquire South African company, Eland Platinum Holdings, for US$1.1bn.

Figure 11: **Africa mining deals by sector**

	2005 By value (US$bn)	2006 By value (US$bn)	**2007** By value (US$bn)	% share
Base metals	0.1	0.3	2.7	20%
Diversified	0.3	0.3	0.5	4%
Precious metals	1.0	8.6	6.5	48%
Other	8.2	0.5	3.7	28%
Total	**US$9.5bn**	**US$9.8bn**	**US$13.5bn**	**100%**

Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

In South America, there were no deals to rival the 2006 purchase of Caemi Mineracao e Metalurgia by CVRD (now Vale) for US$2.6bn. The biggest 2007 deal was for US$1.6bn and saw Anglo American gain a 49% stake in Brazilian iron ore mining exploration company, MMX Minas-Rio Mineracao e Logistica. The deal is part of Anglo American's stated aim to acquire greater bulk in iron ore.

Figure 12: **South America mining deals by sector**

	2005 By value (US$bn)	2006 By value (US$bn)	**2007** By value (US$bn)	% share
Base metals	0.5	3.7	4.2	49%
Diversified	0.2	0.5	1.4	17%
Precious metals	0.6	2.3	1.6	18%
Other	0.0	2.2	1.4	16%
Total	**US$1.4bn**	**US$8.6bn**	**US$8.7bn**	**100%**

Source: PricewaterhouseCoopers, *Mining Deals Annual Review 2007*

Looking ahead

Economic slowdown in the US, continuing financial market uncertainty and fears of actual recession will inevitably cast a cloud of uncertainty over the period ahead. From the macro-economic point of view, much will depend on the continued sustainability of Asian demand. Instabilities are likely to deliver a bumpier deal-making ride although the fundamentals for M&A activity in mining remain strong.

At the very top end of the market, 2008 looks set to be the year of super-consolidation as the giants of the mining and metals sectors seek combinations that will increase their worldwide scale. Such moves are themselves a huge signal of market confidence. The super-consolidation race may include players from China and Russia as well as the established international mining and metals majors. The landscape of the sector is set to look very different once the coming wave of mega-mega-deals is settled. Moreover, the super-consolidation deals will spawn a round of related deal activity as companies reorganise portfolios and divest non-core assets.

The strength of the mining M&A market will also continue to be influenced by moves from state-owned enterprises and companies from outside the immediate mining sector moving upstream to secure mining assets. Further down the industry scale, consolidation has a long way to run in many sectors and, indeed, the trend towards super-consolidation will add to the consolidation imperative. The quest for diversification and filling resource pipelines will continue to be a strong overriding factor. There is considerable scope for deal-making in fragmented sectors such as copper and lead/zinc as is the case with other sectors in particular territories, such as gold in China.

There is potentially more political risk in the mining sector than previously with aggressive expansion in territories such as the Democratic Republic of Congo, Ecuador and Bolivia. The 2008 election year in Russia may slow down the flow of domestic mining deals in that country as companies await clarity on political developments. Many of the significant deals in Russia have already been undertaken although there remains scope for further privatisations, particularly of gold and copper deposits. However, as noted above, we can expect Chinese and Russian companies to continue to be active bidders on the international mining scene.

The struggle that some exploration companies face to gain funding for development potentially opens the door to friendly deals with big companies or end users wishing to secure inputs. Also, among smaller companies, the stock market falls of early 2008 have made some targets much cheaper and may lead to a spate of hostile offers.

In conclusion, mining deal activity is set to remain strong. A series of landmark deals may reshape the top tier and consolidation will continue to be a strong deal driver among mid-tier and smaller companies. Whatever its size, no company will be able to be complacent about their M&A strategies as the industry continues to chart a dynamic M&A path.

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