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Mining M&A reaches record levels in 2001

Key words

Mergers and acquisitions, consolidation, mining, metal market

Abstract

This article takes an analysis of the mining M&As during 2000 and 2001 as a starting point for a discussion of the concentration of metal mining industries in general and in the gold and iron ore industries in particular. Potential influences on metal prices are also addressed. Article indicates the high pace of consolidation of global mining and the increasing attractiveness of valuable assets of mining companies, describes the major deals in 2000/2001 and provides detailed information about the most active companies: Billiton, BHP, Rio Tinto, Anglo de Beers. The author presents the structure of the gold industry and clarifies the relationships between the largest companies on the gold and iron markets. The influence of consolidation of the global mining industry on the metal market structure and the 2002 forecast is also considered.

1. M&A record in 2001

The battle for control over Australian goldminer Normandy was at its height when most of us were relaxing during Christmas and New Year celebrations. When the dust had settled Newmont emerged as the winner. Even if the victory might turn out to be a Pyrrhic one, the fight is indicative of the higher pace of consolidation of global mining and the increasing attractiveness of valuable assets.

2001 was a top year for mining M&A activities. Over 40 billion US dollars (USD) were recorded in Raw Materials Group's Mining M&A register as spent on consolidation of the fragmented global mining industry. This is the highest figure since 1994 and 60% higher than the

^{*} Raw Materials Group, Stockholm, Sweden.

earlier record from 1998 and up from 18.7 billion USD in 2000. See Table 1. The cyclicity of mining M&As could partly be related to the ups and downs of metal prices, with low levels in both 1998 and 2001. This is however not sufficient to explain the troughs and crests, other factors are certainly at play. External influences such as the political changes in South Africa, the privatisation trends in both developing countries and the former centrally planned economies do play a great role in determining the timing of mining M&As. There are also internal factors such as the dynamic climate in Gencor/Billiton/BHP, which will most probably continue to be a factor pushing for more deals in and by the re-emerging Big Australian.

Mining mergers and acquisitions

TABELA I

TABLE I

Fuzje i przejęcia w górnictwie

	1995	1996	1997	1998	1999	2000	2001
Total volume (billion USD)	16.5	12.5	18.5	25.7	19.1	18.7	40.9
Number of deals >10 MUSD	47	82	91	88	100	80	81

Source: Raw Materials Data, M&A register, Stockholm 2002.

This article takes an analysis of the mining M&As during 2000 and 2001 as a starting point for a discussion of the concentration of metal mining industries in general and in the gold and iron ore industries in particular. Potential influences on metal prices are also addressed.

2. Major deals in 2000 and 2001

Most of the mining M&As in 2000 and 2001 have been friendly and agreed ones. The twenty largest transactions are found in Table 2. The two largest transactions are both more than twice the size of the biggest deal earlier recorded. There is a big jump from these two, each over 10 billion USD, the third of 4.4 billion and down to the fourth and fifth largest deals of just above 2 billion USD each. The BHP/Billiton and the Anglo American/De Beers deals show that the largest entities are now getting bigger also in the mining sector. To create new constellations out of the top companies requires considerable amounts of capital, at least when comparing to a few years ago. If the largest deals excluded, the average amount involved in a mining M&A has not risen considerably over the years. However it is obvious that there are still many small companes trailing the biggest ones. This indicates that many more M&As remain to be made in the sector among the lesser companies. The mining industry is still fragmented and at the present moment due to low metals prices, many good deals are still to be concluded.

Major deals in 2000/2001

TABELA 2
Największe transakcje w latach 2000—2001

	Buyer	Target	Sector	Year	Amount (MUSD)
1.	ВНР	Billiton	Diversified	2001	14 500
2.	Anglo American	De Beers	Diamonds	2001	11 440
3.	Alcan	Algroup	Aluminium	2000	4 400
4.	Newmont	Normandy	Gold	2001	2 365
5.	Barrick	Homestake	Gold	2001	2 282
6.	Rio Tinto	North	Diversified	2000	2 030
7.	Billiton	Worsley	Alumina	2000	1 490
8.	Billiton	Rio Algom	Base metals	2000	1 200
9.	OM Group	Degussa Hüls	Precious metals	2001	1 091
10.	Teck	Cominco	Zinc	2001	891
11.	Rio Tinto	Comalco	Aluminium	2000	870
12.	CVRD	Samitri	Iron ore	2000	833
13.	CVRD	Ferteco	Iron ore	2001	696
14.	Newmont	Battle Mountain	Gold	2000	557
15.	De Beers	Venetia	Diamonds	2000	533
16.	Xstrata	Asturiana de Zinc	Zinc	2001	495
17.	Century Aluminium	Hawesville smelter	Aluminium	2001	468
18.	Rio Tinto	Ashton	Diamonds	2000	413
19.	ВНР	Diamet	Diamonds	2001	408
20.	Billiton	Gove	Alumina/bauxite	2000	393

Source: Raw Materials Data, M&A register, Stockholm 2002.

When comparing the twenty largest deals in 2000/2001 with the list of the top deals since 1994 it is obvious that gold activity in 2000/2001 has been much higher than in the whole period since 1994. There has also been considerable action in the iron ore industry in the last two years. ¹

Who Owns Who in Mining, Raw Materials Group, Roskill Information Services London 2001.

Largest mining mergers & acquisitions since 1994

TABELA 3

Największe fuzje i przejęcia od 1994 r.

	Rank Buyer	Target	Sector	Year	Amount (MUSD)
1.	ВНР	Billiton	Diversified	2001	14 500
2.	Anglo American	De Beers	Diamonds	2001	11 440
3.	Alcoa	Reynolds	Aluminium	1999	4 600
4.	Alcan	Algroup	Aluminium	2000	4 400
5.	RTZ	CRA	Diversified	1995	4 000
6.	Alcoa	Alumax	Aluminium	1998	3 800
7.	Anglo American	Minorco	Diversified	1998	3 700
8.	Inco	Voisey's Bay	Nickel	1995	3 300
9.	Consortium	CVRD	Diversified	1997	3 150
10.	Anglo American	Anglogold	Gold	1998	3 100

Source: Raw Materials Data, M&A register, Stockholm 2002.

3. Most active companies

Billiton has stirred up the global mining industry. First by a series of huge acquisitions and most lately with the spectacular merger with BHP. Billiton is way ahead of all other competitors and is the company involved in the most M&As during the last 2 years. Among its acquisitions in 2000 were: Gove bauxite and alumina complex bought from the Algroup, a result of a forced sell off to get permission to proceed to merge with Alcan and the acquisition of an additional 56% of the Worsley alumina refinery. Billiton also paved the way for future copper expansion by taking over Cambior's La Granja project in Peru and in a similar way preparing for its entry into iron ore mining by taking a minor but still influential 2.7 per cent share in Brazilian iron ore giant CVRD. Most of 2001 has been spent digesting these acquisitions and re-strategising after the merger with the much bigger, but ailing Australian BHP. It probably takes some further time in 2002 before the merged BHP/Billiton is ready to strike again — but more deals will undoubtedly come when the new management has finished to re-evaluate the various branches of the merged giant.

Rio Tinto had a quiet year in 2001, at least in terms of M&As. It was all the more active in 2000 when it concluded a number of strategic deals such as: The acquisition of diversified North primarily to get hold of its iron ore assets in Australia and Canada; It won the protracted fight with De Beers over the Australian diamond producer Ashton; Minorities were bought out

from Comalco. Rio Tinto, with a strong balance sheet, will continue to look for the best assets and will be prepared to fight hard when a good opportunity appears in 2002.

The first stage of the restructuring of the South African mining sector was completed already in 1999. In that year Anglo American moved to London. At the same time many of the traditional features, including box-in-box ownership and cross-holdings within the group, were straightened out and minorities were bought out. In short all the cumbersome structures partly created to by-pass apartheid sanctions and foreign exchange regulations were scrapped. The only remaining cross-holding was the link between Anglo and De Beers but also this was removed in early 2001. In its quest for new greener pastures outside Southern Africa the Anglo group has however been less successful. Its bids for CVRD, Ashton and recently for Normandy have been crushed by competitors. One of the main reasons why Anglo is so keen to expand outside South Africa is at the same time also an explanation why it has lost these battles: the rebate put by investors on its assets because of their location. South African gold ounces in the ground are less valuable than those in North America. The fervor of these fights could be due to the size of Anglo; if it succeeds with a major acquisition it will become much more dominating than it competitors will. Possibly there might also be another psychological explanation, the traditional Anglo American arrogance triggers everybody's fighting spirit?

The total figures of mining M&A presented above in Table 1 are underestimates for a number of methodological reasons. They only include few of the deals made in the CIS republics and China. Among the M&As in Russia, which are difficult to come to grips with and where the seller, the buyer and most details often are hidden, there is for example Sual and Traskonsalt merging most of the Siberian aluminium smelters into one company. This is certainly a major merger which would appear among the largest deals in 2001 if only the amounts involved where known. There are also transactions in the market economy countries for which the involved amounts are not made public. Examples of such deals in 2001 are: Alcoa's deals concerning the Longview and Sherwin aluminium smelters, which were sold to private interests; SA Chrome bought all of Hernic Chrome in South Africa; Dadco Alumina & Chemicals took over Aloca's half of the Stade refinery in Germany; Raymond Boule acquired 50% of Sierra Rutile Holdings. It is difficult to estimate how much the total sum would increase if all these figures were released and included in the RMG M&A Register. It is certainly an additional couple of billion dollars.

4. Structure of the gold industry

Most observers agree the increasingly hostile fight between Newmont and AngloGold for Normandy has pushed the price too high. The intensive fight for Normandy might have clouded the judgement of the boards and managements of the contestants. There is a danger that the triumphing Newmont management will find themselves in the same situation as BHP did after taking over US copper producer Magma — they have paid much too much and cost reductions simply cannot make up for it. After all, the benefits of merging two mining companies are limited. Unless the assets (the mines) are geographically close to each other economies of scale are difficult to obtain through traditional production rationalisation. The potential for advantages is mainly in the financial area.

Control over the gold mining industry will however remain widely dispersed — also after the most recent merger between Barrick and Homestake and the fight for Normandy. Newmont will become a slightly more important force in world gold mining than AngloGold would have been had they succeed. See Table 4. The gold industry is slowly getting more concentrated when comparing to 5 years ago. There is, however, still a long way to go to reach the levels of concentration of the 1970s and early 1980s. In those days Anglo American Corporation of South Africa was, on its own, controlling almost 40% of Western world gold output. The 10 largest producers controlled over 85% and of these almost 90% were South Africa based.

Gold market concentration 1975—2001

TABELA 4

TABLE 4

Koncentrac	ia na rvnku z	łota w latach	1975-2001

	19	75	19	90	19	95	20	00	20	01
	Rank	% ww								
AngloGold	1	39.1	1	16.6	i	13.8	1	11.4		
- with Normandy									1	12.0
without									3	8.3
Newmont	14	0.8	4	3.6	6	3.2	2	7.2		
— with Normandy									1	12.3
— without									3	8.5
3 largest companies		61.2		28.1		23.3		24.7		29.9
10 largest companies		80.7		47.2		44.5		52.1		57.4
15 largest companies		85.6		54.9		54.1		60.9		64.5

1. % ww = per cent of Western world production.

Source: Raw Materials Data, "What if" modeling facility, Stockholm 2002.

The restructuring of the gold sector is however more complex than the figures in Table 4 might indicate. AngloGold is not only getting smaller, it is also cutting its average production costs by acquiring low cost production capacity outside of South Africa at the same time as it is divesting parts of its traditional base in South Africa. AngloGold is moving down the cost curve and at the same time spreading its political and geographical risk.² Many of its South African

^{2. 2001} figures are based on ownership situation as of early December 2001 and production levels of calendar 2000 in each mine.

² Risk Ratings of Mining and Metal Companies, Raw Materials Group and PRS Group, Syracuse NY, USA 2001, www.prsgroup.com

operations, particularly in the Free State, have dug deeper and deeper and as a result costs have gradually increased. Some of these mines have been sold off to emerging producers, which are both reorganising and rationalising production across earlier so called farm fences and also specialising in operating marginal mines on low cost budgets without the huge overheads that for decades characterised South African mining houses' modus operandi. Reshaped Harmony and DRD together with new black empowerment operators such as African Rainbow Minerals (ARM) are recombining what is left over by the major companies. This trend is economically motivated but also politically driven. ARM with Patrice Motsepe at the helm together with former politician Tokyo Sexwale's Mvelaphanda Holdings are forming the core of black participation in the mining industry, which is now more successful than the first attempts with JCI were in the mid 1990s. ARM has in a few years grown to become the 27th largest gold producer in the world in 2000. It is on par with Cambior and only marginally behind Goldfields (Australia) and it is still privately controlled. But due to lack of economic details of the company it is still too early to judge its future possibilities and sustainability. Entering the platinum business through the Maandagshoek joint venture with Amplats indicates a steady course but also perhaps a lack of empowerment partners.

All recorded gold deals in RMG's M&A register in 2001 amount to 6.1 billion USD. Of the total of 81 deals over 10 MUSD gold accounts for 24. The most important are:

- Barrick merged with Homestake in a friendly takeover.
- Gold Fields (South Africa) bought WMC's gold assets in a 232 MUSD deal.
- As a precursor to the Newmont Normandy deal, Franco Nevada took a 19.9% stake in Normandy in exchange for its Ken Snyder mine and cash.
 - Goldfields (Australia) acquired Delta.
- Harmony and ARM bought most of AngloGold's remaining Freestate assets for an estimated 264 MUSD.
 - Newmont won the fight for Normandy (at least as it looks 4/1 2002).

Also after the turbulence in the gold sector in 2001 the gold industry will continue to be fragmented and more consolidation will be necessary to even think about influencing the gold price by production cuts.

5. Iron ore

The iron ore industry is one of the few metal industries that has experienced a continuous consolidation trend since the 1970s. Please see Table 5. After several M&As in the last years the iron ore industry is among the most concentrated of all minerals.

During 2000/2001 a series of transactions have been carried out, particulary in Brazil, where CVRD has consolidated iron ore production through the take over of Samitri from Arbed, Ferteco from Thyssen Krupp and sharing of CAEMI with Mitsui as well as taking over Bethlehem Steel's indirect minority post in MBR. Deals, together valued at almost 1.9 billion USD, were concluded over two years only. With the crossholdings to CSN severed in early 2001 further expansion of CVRD outside of Brazil and outside of iron ore is already underway. This expansion will be one of the great dynamic forces in international mining M&A in the next few

Iron ore market consolidation 1975-2001

TABELA 5

Konsolidacja na rynku rudy żelaza w latach 1975-2001

	Largest [% ww]	3 largest [% ww]	10 largest [% ww]
2001	23.2	46.2	70.2
1995	15.4	34.2	60.5
1990	15.5	31.4	58.3
1975	8.0	17.2	40.8

- 1. % ww = per cent of Western world production.
- 2. 2001 figures based on ownership situation as of early December 2001 and production levels of calendar 2000 in each mine.

Source: Raw Materials Data, Stockholm 2002.

years. Iron prices being set in different way to base metals could however possibly be more easily influenced by the increasing concentration on the supply side. It must however also be noticed that also consumers, the steel industry, is getting more concentrated and their opportunities to act in a united fashion also increases. Only next year's rounds of price negotiations will tell what the final outcome will be.

6. Metal markets structure

The gold and iron ore industries are compared to some other metal mining industries in Table 6. It is obvious that gold is among the least concentrated mining sectors in 2001. Iron ore is slightly more concentrated, more or less on the same level as copper. Tin is by far the most concentrated metal of the economically most important ones. In the case of tin the high level of concentration was a direct effect of the tin crisis of the mid 1980s when tin prices collapsed after the failure of the tin agreement stockpiling policy. Since then some of the earlier largest producers such as Malaysia Mining have closed down and almost all of the smaller ones have also left the industry. Concentration has increased dramatically. Tin prices have however not been helped by this high concentration. The copper industry has traditionally been dominated by a few huge producers in the US, Central Africa and Chile. The level of concentration was high already in the 1960s. With the demise of the Zambian and Zairean production and the introduction of the SXEW hydrometallurgical methods in copper, it became feasible to extract large porphyry deposits mainly in Latin America. This new technology made huge open pit mines profitable and helped to lower the concentration for a period. However in the late 1990s there has been a strong tendency to merge mainly to gain financial strength and the concentration of the copper industry has increased again. Zinc has always been produced in fairly small, often underground, mines and there has been no technological breakthrough comparable to that in copper. Hence the concentration is lower than most other metals.

Metal market concentration 2001

TABELA 6

Koncentracja na rynl	ku metali w 2001
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	Largest [% ww]	3 largest [% ww]	10 largest [% ww]
Tin	31.5	65.6	79.3
Iron orc	23.2	46.2	70.2
Copper	14.9	35.4	74.6
Gold	12.3	29.9	57.4
Zinc	12.2	30.1	57.1

- 1. % ww = per cent of Western world production.
- 2. 2001 figures are based on ownership situation as of early December 2001 and production levels of calendar 2000 in each mine.

Source: Raw Materials Data, Stockholm 2002.

According to figures made available by Warren Oliver at UBS Warburg in London³ these concentration levels are higher than what is found in most other branches of industry. Certain commodities such as oil and steel are less concentrated than all the metals in Table 6, while for others such as cement and ehtylene the concentration levels are equal to gold and zinc. Only the automotive industry and earlier monopolies such as telephones and postal services reaches levels like tin and iron ore but then only in Europe, Japan or the US there is no global leader.

7. Consolidation of the global mining industry

The global surge in M&As has however not affected the overall structure of the industry as much as might be anticipated. Table 7 gives a first estimate of the new balance of power at the end of 2001. The table ranks the world's largest mining companies' control of global mine production measured by their percentage control over the value of total world value of non-fuel mineral production. In order to give a first estimate directly in the beginning of January a number of simplifications have been made: Firstly the production figures reflect full year figures for 2000 since 2001 figures are not available yet. Secondly the mineral production values are the 2000 averages rather than the 2001 ones. But ownership figures are all of 31st of December 2001. These simplifications mean that production growth and/or cut backs have not been taken into account but only M&As, hence the same figure in 2000 and 2001 in the table for companies which have not been engaged in major M&A activities in 2001. We estimate however that the overall picture of the structure of the industry is fairly correct in spite of these temporary

Personal communication, January 2002.

Raw Materials Group TOP GLOBAL MINING COMPANIES 2001

TABELA 7

10 największych producentów górniczych w 2001 r.

Controlle	d share of total value of	global non-fuel mi	nerals production [%	6]
		2001	2000	Rank 2000
1. Anglo American	UK	6.1	6.2	(1)
2. Rio Tinto	UK	4.3	4.3	(2)
3. BHP Billiton	Australia/UK	3.4	2.5	(3)
4. CVRD	Brazil	2.9	2.3	(4)
5. Norilsk Nickel	Russia	2.1	2.1	(5)
6. Codelco	Chile	1.9	1.9	(6)
7. Newmont	USA	1.9	1.3	(9)
8. Phelps Dodge	USA	1.4	1.4	(7)
9. Barrick	Canada	1.4	0.8	(20)
10. Grupo Mexico	Mexico	1.3	1.3	(8)
Sum Top 10 larges	t companies	26.7	24.1	

Source: Raw Materials Data, Stockholm 2002.

simplifications. We also feel confident that the main conclusion about a slowly increasing total level of concentration will hold.

All the M&A activities of 2001 has increased the level of concentration measured both at the level of the largest three and the largest ten companies. For the first time in many years a clear increase in the share of total value of all non-fuel minerals controlled by the largest ten companies can be observed. In 2000 the figure was almost 24% and it increased by almost 11 per cent to just above 26%. This growth took in place in spite of the largest controlling company, Anglo American, actually decreasing its control and the second largest company Rio Tinto not increasing its share through M&As at all.

Although it is difficult to compare figures over long time periods it should be pointed out that in 1975 Anglo alone controlled over 15 per cent of the total value of all Non-fuel minerals produced in the Western world. The mining industry as a whole is, as is the gold sector, less concentrated than it was 25 years ago even after over 122 billion dollars have been spent on M&As during the last 5 years only.

In spite of major sell offs, particularly in the AngloGold subsidiary but also in other areas in order to increase profitability, Anglo American retained its leading position. The Anglo American group, in various shapes over the years but still largely controlled by the

Oppenheimer family, has been steadily at the top spot since at least 1975, when RMG started to monitor global structural changes in the mining industry. Rio Tinto is likewise the perpetual number two although the distance to Anglo is getting smaller and smaller. Rio is also getting competition from behind, where the newly merged BHP/Billiton in one rush has caught up with number two and also put a considerable distance between itself and number four CVRD. Among the following of the ten largest companies the difference in controlled production is less.

The three first companies are all true global players, multi-commodity focused and with operations all over the globe. Anglo is still having a strong South African focus but is actively addressing this imbalance. One example of its eager attempt to do so is the struggle for Normandy. BHP/Billiton has important assets outside the mining sector and is actively involved in both steel and oil. Rio Tinto is perhaps the most mining focused of the three top companies while Anglo has important holdings also in the smelting and refining of metals. The surprisingly small addition to BHP that Billiton has meant in table 7 is mostly due to the fact that the table is based on control of the mining stage only. Metal smelting and refining are not considered and hence industries such as aluminium where the value is mostly created in the smelting (alumina refining) and refining (aluminium smelting) stages of the production process are undervalued compared to for example iron ore or gold where most of the value added is created at the mining stage and not in steel production or gold refining.

The runners up in rank 5, 6, 7, 8 and 9 are all more or less one-commodity companies. It is only in rank 10 where we find Grupo Mexico, which is the next multi commodity company. Brazilian CVRD is actively diversifying but is at present deriving most of its control from the iron ore sector. Additions from bauxite and gold are still almost negligible. It is however interesting and important to notice that among the top 10 companies there are four from emerging economies: CVRD, Norilsk, Codelco and Grupo Mexico. In addition to the three top companies there are an additional three North American companies, Newmont and Phelps Dodge from the US and Barrick based in Canada. It remains to be seen if BHP/Billiton will remain divided between the UK and Australia or if the centre of gravity will move towards London. In any case the two important mining countries in terms of production and exploration, Canada and Australia, only has one representative each among the top ten mining companies of the world.

8. Forecast for 2002

M&A activities will most likely continue on a high level also in 2002. There are several factors pointing in this direction:

- Sell offs have been announced either because of changed strategies or due to regulators' demands: Exxon being one of the last oil companies to divest its copper mining interests is one example of the former category, Quebec Cartier, which must be sold by CVRD to get clearance for the CAEMI take over by the EU authorities, is one example of the latter type.
- Privatisations continue although most deals have already been completed. India will probably once again try to sell parts of HCL.

- The low metal prices have struck some producers badly and their complete operations or certain assets are up for sale such as Australian base metal producer Pasminco and Boliden's Myra Falls mine.
- Some metal sectors are still fragmented such as the zinc, lead and gold and several players are interested in consolidating to achieve cost cuts and other coordination benefits.
- High level of activity often leads to follow up deals by competitors, which were left out in earlier rounds. AngloGold will surely try again to increase its market share in the wake of losing Normandy.
- Some companies like Rio Tinto have large funds, which could more safely be used for M&A than on uncertain exploration activities to keep and grow and market shares.
- Other companies have announced their intention to grow by acquisitions such as Norilsk and CVRD.
 - The pressure for further cost reduction will remain strong in all mining sectors.

9. Effects on metal prices

It is important to note that today's metal markets and mining companies are far more transparent than was the case during the 1950s and 60s - hey days of producer pricing. But, given the long history of attempts to manipulate copper and aluminium markets⁴, these concentration levels may soon become high enough to cause concern. Anti-trust watchdogs in Europe and the USA are already making close examinations of the proposed mega-mergers, but their organisations do sometimes, at least in the European Commission, not fully appreciate the specificities of global metal markets and mining well enough to always make the wisest decisions. And even if the proposed mergers do pass unchallenged a potential for price influencing via production may remain. Shareholders too should keep a close eye on this. There is no guarantee that the biggest company necessarily delivers best shareholder value. The RMG has stated for a few years that in our analysis there is no immediate risk for increased metal prices. On the contrary there is probably a need for some rationalisation to create effective minimum sized producers. The level of concentration is however now reaching levels, which definitely warrants close and continued scrutiny from all sides. This is particularly true for the iron ore industry where the steel companies are no much smaller and less powerful than their ore suppliers.

⁴ Corner, Trevor Tarring, Metal Bulletin Books, London 1998, www.metalbullectin.com

FUZJE I PRZEJĘCIA W GÓRNICTWIE — REKORDOWY POZIOM W ROKU 2001

Słowa kluczowe

Fuzje i przejęcia, konsolidacja, górnictwo, rynek metali

Streszczenic

Artykuł ten jest analizą fuzji i przejęć w górnictwie w latach 2000 i 2001 i zarazem wstępem do dyskusji na temat koncentracji w przemyśle górnictwa metali, w szczególności złota i żelaza. Artykuł kładzie nacisk na wysokie tempo konsolidacji w górnictwie w skali światowej, ukazuje rosnącą atrakcyjność aktywów przedsiębiorstw górniczych dla inwestorów, opisuje ważniejsze transakcje fuzji i przejęć w latach 2000 i 2001, a także podaje szczegółowe informacje na temat najbardziej aktywnych firm na rynku przejęć: Billiton, BHP, Rio Tinto, Anglo de Beers. Autor przedstawia strukturę rynku producentów złota i objaśnia relacje zachodzące pomiędzy największymi przedsiębiorstwami na rynku rud żelaza i złota. Rozważany jest także wpływ konsolidacji w globalnym przemyśle górniczym na strukturę rynku metali oraz prognoza na rok 2002.