Industrial Products
Metals

Forging ahead*

Mergers and acquisitions activity in the global metals industry, 2006


Kumar

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Methodology

Our report provides an analysis of domestic and cross-border deal activity in the metals industry (with the exception of mining transactions). It is based on published mergers and acquisitions from Bloomberg, mergermarket and Zephyr. Our analysis encompasses announced completed deals for which values have been disclosed.

Introduction

Welcome to the third edition of *Forging Ahead*. Our report covers mergers and acquisitions in the global metals industry during 2006.[1] This year's issue also contains an analysis of the major differences in the views of chief executives in the metals sector and those in other industry sectors, based on data drawn from PricewaterhouseCoopers' *10th Annual Global CEO Survey.* We have supplemented our survey findings with a discussion of some key industry concerns with Daniel DiMicco, chairman of Nucor, and Michel Jacques, chief executive of Alcan Primary Metal Group.

In earlier editions of *Forging Ahead*, we noted the extent to which the metals industry is consolidating to improve its financial strength, increase its negotiating power with its customers and suppliers, and boost capacity utilisation. This pattern continued in 2006. There were 224 disclosed deals, marginally fewer than the 250 that occurred in 2005. But the aggregate value of these deals was a huge US$77.4 billion – more than double the $34.8 billion that was swapped the previous year.[2]

The steel sector once again accounted for most of the deal-making, with 166 transactions collectively worth $70.4 billion, whereas the 165 transactions that took place in 2005 were collectively worth only $27.4 billion. The mega-merger that created Arcelor Mittal, the world's first 100m-tonne-a-year (Mtpy) steelmaker, was responsible for this massive surge in deal values; at $46 billion, it single-handedly accounted for 59% of the total value that was traded in 2006. However, the consolidation of the steel sector is far from over. In late 2006, India's Tata Steel announced that it would acquire the Anglo-Dutch Corus Group for $12.1 billion, although the deal was not completed until 2007.[3]

The aluminium sector saw relatively few mergers and acquisitions. There were 33 deals with a total disclosed value of $4.6 billion in 2006, a marginal increase on the $4.2 billion that was exchanged in 2005. But 2007 is likely to be busier; early in the year, RUSAL and SUAL joined forces with Glencore International to create the world's largest aluminium producer, a move that may encourage other firms to follow suit.

Deal-making between companies involved in the production of other base metals was also relatively thin on the ground. There were 25 transactions with a total disclosed value of $2.4 billion in 2006, substantially less than the 44 deals collectively worth nearly $3.3 billion that occurred in 2005.

The established markets of the West played a far bigger role than before. Companies based in Western Europe and North America jointly accounted for $65.4 billion of the value that was traded – three times the sum that changed hands in the two regions the previous year. Conversely, companies based in the emerging markets accounted for only $12 billion. This is partly because Arcelor Mittal spent much of 2006 integrating its operations rather than acquiring steelmakers in emerging countries. But M&A activity in the Asia-Pacific region also proved quite sluggish, despite the Chinese central government's plans for rationalising production capacity. The provincial authorities have been slow to act on Beijing's directions, largely because they do not want to lose the tax revenues local mills generate. So the Chinese steel sector remains very fragmented.

We hope that you will enjoy this year's edition of *Forging Ahead*. If you have any queries about our findings, please contact us. Our fourth issue, covering deal activity in 2007, will be released in May 2008. The three issues that have been published to date are available at www.pwc.com/metals.

Jim Forbes
Global Metals Leader

[1] For the purposes of this document we have defined the metals industry as steel, aluminium and other base metals.
[2] All subsequent references are to US dollars.
[3] We have not included the value of any deals completed in 2007 within our tables for 2006.

Deal numbers: soaring sums

The metals industry continued to consolidate in 2006, just as we predicted it would in earlier editions of *Forging Ahead*. There were 224 deals for which values were disclosed, a slight drop on the 250 deals that took place in 2005. But they were collectively worth $77.4 billion – massively more than the $34.8 billion that was traded the previous year (see Figure 1).

Domestic deals accounted for more than half the total number of transactions that were completed in 2006, as they did in the preceding three years. But both the volume and value of the domestic deals that took place was less than in 2005, with 126 transactions worth $10.4 billion, just 59% of the amount that was exchanged the previous year. Conversely, although the number of cross-border deals was marginally smaller, their aggregate value was very much higher – thanks to the $46 billion merger of Mittal Steel and Arcelor.

The steel sector

The steel sector once again dominated the scene with 166 deals collectively worth $70.4 billion – nearly 91% of the total value that was swapped in 2006 (see Figure 2 on page 6). However, the pace at which the steel industry is consolidating has begun to slow down; deal volumes increased by just 0.6% between 2005 and 2006, whereas they increased by 41% between 2004 and 2005. And if Mittal Steel had not joined forces with Arcelor, the aggregate value of the transactions that took place would have been only $24.4 billion, $3 billion less than the $27.4 billion that was involved the year before.

Figure 1: Cross-Border and Domestic Deals in the Metals Industry

	2006				2005			
	Number	**Value (US$ billion)**	**Percentage of Total Number**	**Percentage of Total Value**	**Number**	**Value (US$ billion)**	**Percentage of Total Number**	**Percentage of Total Value**
Cross-Border	98	67.0	44	87	99	17.2	40	49
Domestic	126	10.4	56	13	151	17.6	60	51
Total	224	77.4	100	100	250	34.8	100	100

Sources: Bloomberg, mergermarket, Zephyr and PricewaterhouseCoopers analysis
Note: Values of cross-border deals are assigned to companies acquired

Figure 2: Deals by Industry Sector

	2006			2005		
	Steel	**Aluminium**	**Other Metals**	**Steel**	**Aluminium**	**Other Metals**
Domestic						
Number	98	19	9	104	25	22
Value (US$ million)	6,366	3,021	1,053	13,449	2,845	1,971
Cross-Border						
Number	68	14	16	61	16	22
Value (US$ million)	64,046	1,577	1,355	13,937	1,307	1,280
Total						
Number	166	33	25	165	41	44
Value (US$ million)	70,412	4,598	2,408	27,386	4,152	3,251

Sources: Bloomberg, mergermarket, Zephyr, and PricewaterhouseCoopers analysis
Note: Values of cross-border deals are assigned to companies acquired

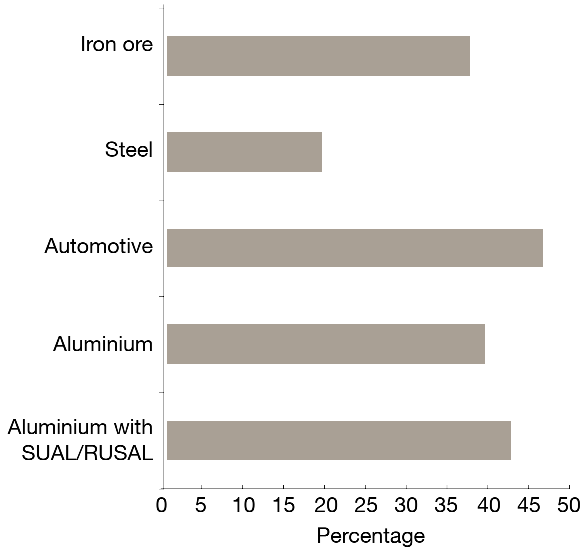
Nevertheless, we believe that the consolidation of the sector is far from complete. Arcelor Mittal has made no secret of its ambition to become a 160 Mtpy producer within the next five years and, if it is to do so, it will need to increase its output by about 42 Mtpy. The group has already announced that it plans to add another 20 Mtpy, with the expansion of its facilities in Ukraine, Central and South America, and South Africa, and the completion of a greenfield project in India. But this will still leave it some 20 Mtpy short of its goal.

Hence the rumours that Arcelor Mittal will soon be on the deal-making path again. Recent speculation about possible targets has focused on Russia's Magnitogorsk Iron & Steel Works (MMK) and South Korea's POSCO, which produced 12 Mtpy and 31 Mtpy, respectively, in 2006.[4] But neither company would be easy to acquire. The governments of both countries regard the steel industry as strategically significant, and would be unlikely to cede control over such large producers to a foreign owner without putting up a considerable fight.

In late 2006, Indian producer Tata Steel also launched a bid for Anglo-Dutch steelmaker Corus Group. The $12.1 billion deal was completed in January 2007, after a fierce battle with Companhia Siderúrgica Nacional of Brazil. It makes Tata the world's fifth biggest steel producer, and gives the group much better access to the markets of Europe and North America, where its presence was previously limited.

Faced with two such hungry rivals, some of the other big steelmakers will almost certainly be on the lookout for potential acquisitions themselves. Moreover, despite the fact that Arcelor Mittal now controls about 10% of the world's steel supply, the industry is still very fragmented. The top five steel producers account for less than 20% of the total steel market, a much smaller percentage than their suppliers in the iron ore industry or customers in the automotive industry enjoy (see Figure 3). We therefore expect that the large steelmakers will continue to consolidate and expand, both up- and down-stream, to control a bigger share of the steel value chain.

Figure 3: The Market Share of the Top Five Companies in the Steel Sector and Related Industries



Sources: AME Mineral Economics, International Iron and Steel Institute, International Organisation of Motor Vehicle Manufacturers, sual.com, automobile manufacturers' websites, Metal Bulletin

Notes: In compiling these data, we have combined the 2006 output of Arcelor and Mittal, the 2006 output of Tata Steel and Corus, and the 2006 output of SUAL and RUSAL

[4] Karen Attwood, "Deal-hungry Mittal in Mexican buy", *The Independent* (December 21, 2006). Available at http://findarticles.com/p/articles/mi_qn4158/is_20061221/ai_n17078853 (accessed on April 25, 2007); Agence France-Presse, "POSCO Readies Takeover Defenses Amid Reports Of Mittal Approach", *Industry Week* (March 16, 2007). Available at http://www.industryweek.com/ReadArticle.aspx?ArticleID=13797 (accessed on April 25, 2007).

It is also worth noting the trend in acquisition multiples (see Figure 4). In 2006, values per tonne of production capacity ranged from $672 to $810 in the North American and Western European steelmakers that changed hands, with two notable outliers. At the high end of the range, Arcelor paid $1,043 per tonne for the Canadian Dofasco, a premium that arose from its bidding war with Germany's ThyssenKrupp in late 2005. Conversely, Stelco commanded just $99 per tonne, when it was restructured and brought out of bankruptcy in April 2006.

The prices Central and South American steelmakers fetched were typically lower, with the exception of the 15.7% stake Arcelor acquired in Acesita, for which it paid a hefty $2,880 per tonne. This was substantially more than the $1,694 per tonne which it paid for an 8% stake in Acesita in 2005, but Arcelor Mittal now holds 90.7% of the common shares and 38.1% of the preferred shares in the company. Based on these values, we anticipate that North American and Western European acquisition multiples will generally remain higher than those in Central and South America and Asia-Pacific in the near term.

The aluminium sector

The aluminium sector was much quieter than the steel sector in 2006; indeed, it was even quieter than in 2005, with just 33 deals, compared to the 41 that took place the previous year, although their aggregate value was a marginally higher $4.6 billion. Two transactions accounted for over half this sum. In August 2006, Corus Group sold its aluminium rolled products and extrusion business (excluding the primary aluminium smelters) to Aleris International for $840m. Four months later, Aleris International itself changed hands, when private equity firm Texas Pacific bought it for $1.7 billion.

The aluminium sector has already consolidated to a much greater extent than the steel sector and the top producers command a far bigger share of the market than their steelmaking peers, as we have formerly noted. Moreover, many aluminium companies already own bauxite mines and alumina operations, thus ensuring that they have ready access to the raw materials they require. So it is hardly surprising that mergers and acquisitions should play a much smaller role in shaping the industry.

However, in October 2006, Russia's top aluminium producer RUSAL, smaller rival SUAL and Swiss commodities trader Glencore International announced plans to merge their respective aluminium and alumina assets in a new entity called United Company RUSAL. The deal was completed in March 2007 and the new group is now the world's largest aluminium producer. It employs more than 110,000 people in 17 countries on five continents, and accounts for about 12.5% of global aluminium production and 16% of global alumina production.

Other metals

The base metals sector also saw relatively little M&A activity in 2006. There were 25 deals between companies involved in producing non-integrated iron ore, tungsten, molybdenum, copper, metal powder, zinc, lead and other such metals, compared with the 44 deals that occurred in 2005. The aggregate value of the transactions whose worth was disclosed was just $2.4 billion, 26% less than the $3.3 billion that was involved the preceding year.

The biggest deal was the $575m acquisition of Thompson Creek Metals, a privately held US firm, by Canada's Blue Pearl Mining. The purchase, which included two mines and a metallurgical refinery plant in Pennsylvania, offers Blue Pearl Mining considerable synergies, and will help it to further its hopes of becoming one of the world's largest molybdenum producers.

Figure 4: Transaction Values per Tonne in a Selection of Recent Steel Acquisitions

Value of Transaction (US$ million)	Percentage of Ownership Share	Crude Steel Capacity (Mtpy)	Value per Tonne	Date Announced	Target Name	Acquirer Name
5,217	100.00	5.0	1,043	23-Nov-05	Dofasco	Arcelor
422	92.25	4.6	99	01-Apr-06	Stelco	Multiple acquirers
407	15.70	0.9	2,880	27-Apr-06	Acesita	Arcelor
46,048	100.00	59.2	778	18-Jul-06	Arcelor	Arcelor Mittal
12,100	100.00	18.0	672	17-Oct-06	Corus	Tata Steel
203	83.27	0.45	542	17-Nov-06	Siderperú	Gerdau
2,300	100.00	2.8	810	20-Nov-06	Oregon Steel	Evraz
1,439	100.00	2.7	533	20-Dec-06	Sicartsa	Arcelor Mittal

Sources: Bloomberg, mergermarket, Zephyr, AME Mineral Economics, company data and PricewaterhouseCoopers analysis
Note: Transaction values with less than 100% ownership stakes have been grossed up to estimate the total value of production capacity when calculating transaction values per tonne

Deal makers: the search for scale

The value of the top 10 deals that took place in 2006 was $65.5 billion – a huge increase on the $19.4 billion that was exchanged in the top 10 deals of the previous year (see Figure 5). Mittal Steel held pole position once again, although its $46 billion merger with Arcelor was worth 10 times the $4.6 billion it paid for KryvorizhStal in 2005. Arcelor Mittal now has a global footprint such as no steelmaker has previously enjoyed, thanks to Mittal Steel's extensive interests in Eastern Europe and Central Asia, and Arcelor's strong presence in Western Europe and Brazil. It has also benefited from substantial synergies; increased operating efficiencies generated savings of $270m in the fourth quarter of 2006, and the group estimates that it saved another $500m in the first quarter of 2007 from consolidating its raw materials purchasing processes and promoting best practice at all its plants.

Figure 5: The Top 10 Deals in the Global Metals Industry in 2006

No.	Value of Transaction (US$ million)	Completed Date	Percentage of Ownership	Target Name	Target Nation	Acquirer Name	Acquirer Nation	Sector
1	46,048	20-Nov-06	93.7	Arcelor	Luxembourg	Arcelor Mittal	Netherlands	Steel
2	5,217	3-Apr-06	100.0	Dofasco	Canada	Arcelor	Luxembourg	Steel
3	4,300	22-Jun-06	39.3	Frontdeal	Cyprus	Severstal	Russia	Steel
4	2,807	5-Oct-06	100.0	Maverick Tube	US	Tenaris	Luxembourg	Steel
5	1,700	19-Dec-06	100.0	Aleris International	US	Texas Pacific Group	US	Aluminium
6	1,324	4-Dec-06	100.0	NS Group	US	IPSCO	Canada	Steel
7	1,300	16-Oct-06	33.0	Trubnaya Metallurgicheskaya Kompaniya	Russia	International institutional investors	International	Steel
8	1,043	17-Nov-06	9.1	Severstal	Russia	International institutional investors	International	Steel
9	944	3-Apr-06	100.0	Earle M. Jorgensen	US	Reliance Steel & Aluminum	US	Other Metals
10	840	1-Aug-06	100.0	Corus Group (Aluminium Rolled Products and Extrusion Businesses)	Belgium, Germany, UK, Netherlands, US	Aleris International	US	Aluminium

Sources: Bloomberg, mergermarket, Zephyr, and PricewaterhouseCoopers analysis

Prior to the merger, Arcelor acquired Dofasco for $5.2 billion and transferred ownership of the Canadian company to a Dutch foundation, in a bid to fend off Mittal Steel's then unwanted attentions. But in June 2006 Arcelor and Mittal Steel settled their differences, when Mittal Steel lifted the financial value of its offer and promised that the Mittal family's stake in the new entity would not exceed 45%.

Meanwhile, Severstal, which had earlier volunteered its services as Arcelor's "white knight", bought various mining and processing assets from Frontdeal, one of several private companies owned by Severstal's chairman, Alexei Mordashov. The $4.3 billion transaction saw Mr Mordashov increase his stake in Severstal to 90% but, in November 2006, he sold 9.1% of the shares, netting more than $1 billion in the process.

US metals service centre Reliance Steel and Aluminum also continued its ambitious expansion programme with the acquisition of Earle M. Jorgensen, one of North America's major distributors of metal products. The group has bought more than 30 businesses since its initial public offering (IPO) in 1991, but the $944m purchase is its biggest to date. It has given Reliance an additional 39 facilities in the US and Canada, and significantly increased its product base.

There were another three big deals in the steel pipe and tube sector, which has lagged behind the rest of the steel industry in terms of M&A activity over the past few years. In October 2006, Argentina's Tenaris paid $2.8 billion for Maverick Tube, North America's biggest manufacturer of welded tubular goods, line pipe and coiled tubing for use in oil and natural gas wells.

The move gives Tenaris a much better foothold in the lucrative US market, where its activities have been seriously restricted since trade regulators imposed anti-dumping duties on seamless oil tubular goods from Argentina, Italy, Japan and Mexico.

A few weeks later, Russian pipe producer Trubnaya Metallurgicheskaya Kompaniya (TMK) raised more than $1.3 billion in an IPO on the London and Moscow stock markets. Chairman Dmitrii Pumpyanskii, who owns two-thirds of the share capital, used $780m to repay the loan he incurred buying out minority shareholders Sergei Popov and Andrei Melnichenk, owners of Russia's MDM Bank. The balance of the funds will be used to upgrade TMK's facilities and pay off debts. And in December 2006, Canadian steel pipe and tube producer IPSCO joined Tenaris on the acquisition trail, with the $1.3 billion purchase of the Kentucky-based NS Group, thereby strengthening its position as the leading supplier of tubes to the North American energy industry. (In May 2007, IPSCO accepted a $7.7 billion cash offer from Swedish speciality steelmaker SSAB.)

US private equity firm Texas Pacific simultaneously bought Ohio-based aluminium sheet manufacturer Aleris International for $1.7 billion, in a deal that included the aluminium rolled products and extrusion operations which Aleris purchased from Corus earlier in 2006. However, private equity players were more remarkable for their absence than their presence in the metals sector last year. In 2005, by contrast, three of the top 10 deals involved private equity houses.

Deal spread: geographical snapshot

There were 61 cross-continental deals collectively worth almost $14.2 billion in the global metals industry in 2006, compared with 58 such deals collectively worth $12.7 billion in 2005 (see Figure 6). But regional transactions represented by far the bigger proportion of the value that was traded, with 163 deals worth a total $63.2 billion – nearly three times the $22.1 billion that changed hands in 2005. The $46 billion merger of Arcelor and Mittal Steel explains this dramatic surge.

The steel sector accounted for 123 regional deals with an aggregate value of $58.3 billion and 43 cross-continental deals with an aggregate value of $12.1 billion (including Arcelor's $5.2 billion acquisition of Dofasco). The aluminium sector accounted for another 23 regional transactions collectively worth $3.1 billion and 10 cross-continental deals collectively worth $1.5 billion – more than six times the $221m that was exchanged in the seven cross-continental deals of 2005.

Figure 6: Regional versus Cross-Continental M&As

	2006			2005		
	Steel	**Aluminium**	**Other Metals**	**Steel**	**Aluminium**	**Other Metals**
Regional						
Number	123	23	17	127	34	31
Value (US$ million)	58,305	3,078	1,848	15,807	3,931	2,332
Cross-Continent						
Number	43	10	8	38	7	13
Value (US$ million)	12,108	1,520	560	11,578	221	919

Sources: Bloomberg, mergermarket, Zephyr, and PricewaterhouseCoopers analysis

Figure 7: M&A Activity by Continent

	2006				2005			
	Number	**Percentage of Total Value**	**Value (US$ million)**	**Percentage of Total Value**	**Number**	**Percentage of Total Value**	**Value (US$ million)**	**Percentage of Total Value**
Western Europe	60	27	49,870	64	58	23	8,687	25
North America	60	27	15,500	20	68	27	8,371	24
Central and Eastern Europe	40	18	8,021	10	39	16	11,947	34
Asia-Pacific	52	23	3,176	4	72	29	4,417	13
Central and South America	12	5	851	1	13	5	1,366	4

Sources: Bloomberg, mergermarket, Zephyr, and PricewaterhouseCoopers analysis
Notes: Values of cross-continental deals are assigned to companies acquired. All companies acquired in Africa are included in the numbers for Asia-Pacific

The increase was largely attributable to two transactions: the $840m sale of Corus Group's aluminium rolled products and extrusion operations to Aleris International; and the $390m management buyout of Asia Aluminium Holdings by AA Investments, an investment services company based in Bermuda. There were a further eight cross-continental deals and 17 regional deals between companies involved in producing other metals, including Blue Pearl Mining's $575m purchase of molybdenum producer Thompson Creek Metals.

Western Europe led the way with 60 mergers and acquisitions worth a record $49.9 billion (see Figure 7). The merger of Arcelor and Mittal Steel gave it a huge head start over North America, even though the total number of transactions in each region was the same. Conversely, deal-making in Central and Eastern Europe produced 40 transactions worth only $8 billion, compared with the $11.9 billion that was swapped in 2005. The value of the deals that occurred in Asia-Pacific and Central and South America was also significantly less than it was the previous year.

Western Europe

The Western European steel sector saw 45 deals collectively worth $48.5 billion take place in 2006, by far the biggest being the mega-merger that produced Arcelor Mittal (see Figure 8). However, several other transactions also deserve a mention. In late 2006, for example, Russian steel producer Novolipetsk Steel (NLMK) bought some of Duferco's steel production and distribution facilities in Europe and North America for $805m, via a joint venture called Steel Invest & Finance in which each company has a 50% stake. Similarly, Spanish investors acquired 5% of the shares in Acerinox, a stainless steel manufacturer based in Madrid, for $331m. Acerinox now plans to set up a stainless steel plant in Asia and is in talks with Nisshin Steel, which already owns a 10.9% stake in the company, to set up a joint venture in India.

Figure 8: M&A Activity in Western Europe

	2006			2005		
	Steel	**Aluminium**	**Other Metals**	**Steel**	**Aluminium**	**Other Metals**
Domestic						
Number	23	4	3	15	6	8
Value (US$ million)	571	4	325	1,447	1,781	1,045
Cross-Border						
Number	22	3	5	17	6	6
Value (US$ million)	47,956	995	19	3,157	274	983

Sources: Bloomberg, mergermarket, Zephyr and PricewaterhouseCoopers analysis
Note: Values of cross-border deals are assigned to companies acquired

Finland's Rautaruukki also sold its Nordic reinforcing steel business to BT Norway, which is owned by Spanish investment firm Bosnian Time. The $153m disposal completed its plans to exit from long steel operations. And Spain's Corporacion Sidenor, which produces speciality forged and cast steel for the automotive industry, bought rival speciality steel producer GSB Acero for $143.2m, net of debt. The deal makes Mexico's Gerdau, which has a 40% stake in Corporacion Sidenor, one of the world's largest manufacturers of speciality steel products.

Meanwhile, there were three cross-border transactions collectively worth $995m in the aluminium sector, although there were no significant domestic deals. They included the sale of the Anglo-Dutch Corus Group's aluminium assets to the US-based Aleris International and the private placement of 2,300 billion shares in Aluminium of Greece for $52.8m.

But if deal-making was down in the Western European aluminium sector, it was even quieter in other parts of the metals industry. In 2006, there were just eight deals collectively worth $344m between companies involved in producing other metals, compared with 14 deals collectively worth more than $2 billion in 2005. Moreover, a single transaction – Italian energy group ERG's $325m acquisition of a 51% stake in copper and copper alloys manufacturer EnerTAD – accounted for 95% of the value that was traded.

North America

Sixty transactions collectively worth $15.5 billion were completed in the North American metals industry in 2006, compared with 68 transactions collectively worth $8.4 billion in 2005 (see Figure 9). The 85% increase in year-on-year values stems from three large cross-border deals in the steel sector: the $5.2 billion acquisition of Dofasco by Arcelor; the $2.8 billion acquisition of Maverick Tube by Tenaris; and the $1.3 billion acquisition of NS Group by IPSCO.

Arcelor Mittal is now integrating Dofasco, which supplies steel to the North American automotive industry, with its own operations. Meanwhile, Tenaris has secured better access to the US and Canadian energy industries. And IPSCO has substantially increased its production capacity in the US; it now has four steel mills and eight pipe mills, as well as several scrap processing centres and product finishing facilities in North America.

US steelmaker Nucor has also been busy. In May 2006, Nucor bought Connecticut Steel, which makes bar products and construction services segments, for $43m. In November 2006, it paid another $180m for Verco Manufacturing, which produces steel floor and roof decking. However, Nucor is clearly keen to diversify still further; in March 2007, it bought more than 96% of the shares in the Canadian Harris Steel Group, which owns 44 plants specialising in concrete reinforcing steel and steel wire products, for just under $1.1 billion. It now aims to acquire the remaining shares and take the company private.

This last deal may well be a preview of what is to come in the North American steel sector during the rest of 2007. The Iron and Steel Statistics Bureau reports that over 40% of Canada's 15 Mtpy of production capacity is heading for new ownership. German steelmakers ThyssenKrupp and Salzgitter, Russian steelmakers Evraz and Severstal, and Indian steelmaker Jindal have all expressed interest in buying Algoma, for example, although talks between Salzgitter and Algoma are now said to have been terminated.

Figure 9: M&A Activity in North America

	2006			2005		
	Steel	**Aluminium**	**Other Metals**	**Steel**	**Aluminium**	**Other Metals**
Domestic						
Number	28	9	4	38	4	5
Value (US$ million)	1,767	2,954	540	3,036	587	76
Cross-Border						
Number	13	2	4	13	3	5
Value (US$ million)	9,623	23	593	4,096	550	26

Sources: Bloomberg, mergermarket, Zephyr and PricewaterhouseCoopers analysis
Note: Values of cross-border deals are assigned to companies acquired

There were another 11 transactions collectively worth nearly $3 billion in the North American aluminium sector. Two domestic deals accounted for the bulk of the value that was traded: the $944m acquisition of Earle M. Jorgensen by Reliance Steel & Aluminum in early 2006; and the $1.7 billion purchase of Aleris International by Texas Pacific later in the year. Private equity also played a part in one of the region's smaller acquisitions, when Wellspring Capital Management bought JW Aluminum (JWA), an aluminium sheet manufacturer based in Charleston, South Carolina, from Superior Plus Income Fund for $310m – barely 12 months after Superior Plus bought JWA for $350m from Wellspring. Superior Plus now plans to reduce its debt and concentrate on its Canadian interests.

Meanwhile, the other metals sector saw eight deals collectively worth $1.1 billion take place. By far the biggest of these transactions was the $110m purchase of a 73% stake in Strategic Minerals Corporation by Evraz in August 2006. Strategic Minerals Corporation is a leading producer of vanadium alloys and chemicals – and the acquisition has furthered the steelmaker's plans for becoming the world's biggest vanadium producer.

Central and Eastern Europe

There were 40 deals in the Central and Eastern European metals industry in 2006, the same number as in 2005. But they were collectively worth only $8 billion, 33% less than the $11.9 billion that was traded the previous year, when Mittal Steel and OYAK purchased KryvorizhStal and Erdemir, respectively, boosting the figures by $7.6 billion (see Figure 10).

Russian steelmakers were much in evidence, as they have been in earlier years. The top 10 manufacturers already control 85% of the country's production capacity, as well as substantial upstream and downstream assets, so they are keen to expand their reach abroad. However, the desire to raise capital lay behind the two biggest transactions. TMK brought in more than $1.3 billion via a joint share offering in London and Moscow, while steel tycoon Alexei Mordashov sold 9.1% of his stake in Severstal, having failed to pull off a merger with Arcelor earlier in the year.

There were another nine deals in the aluminium and other metals sectors, but only two of these transactions were financially significant. In November 2006, Chelyabinsk Zinc, which produces 60% of Russia's zinc, raised $336m selling shares in an IPO on the London stock market. A month later, Finnish industrial and metal components manufacturer Componenta purchased a 55% stake in the Turkish iron and aluminium castings manufacturer Doktas Dokumculuk Sanayi ve Ticaret for $112m. The acquisition is in line with its goal of becoming the European market leader in advanced cast components by 2010.

Figure 10: M&A Activity in Central and Eastern Europe

	2006			2005		
	Steel	Aluminium	Other Metals	Steel	Aluminium	Other Metals
Domestic						
Number	17	2	0	16	6	2
Value (US$ million)	1,894	2	0	6,145	201	107
Cross-Border						
Number	14	5	2	11	2	2
Value (US$ million)	5,677	112	336	5,297	63	133

Sources: Bloomberg, mergermarket, Zephyr and PricewaterhouseCoopers analysis
Note: Values of cross-border deals are assigned to companies acquired

Asia-Pacific

Fifty-two deals with an aggregate value of $3.2 billion took place in the Asia-Pacific metals industry in 2006, a substantial decrease on the 72 deals collectively worth $4.4 billion that occurred in 2005 (see Figure 11). The 37% fall in transaction values stems partly from the lack of M&A activity in China.

Beijing's latest Steel Industry Development Policy aims to promote domestic consolidation and curb foreign investment in the steel sector. It specifies, for example, that all foreign companies seeking to invest in Chinese steelmakers must have an annual output of at least 10m tonnes of crude steel or 1m tonnes of special steel; and that they will "in principle" be barred from taking a controlling stake. But though it has succeeded in damping down foreign interest, there has been relatively little consolidation in the domestic sphere.

In June 2006, Shanxi Taigang Stainless Steel bought various steelmaking assets from its parent, Shanxi Taiyuan Iron & Steel, in an all-share deal valued at $713m. Four months later, the Shandong provincial government merged Jinan Iron & Steel and Laiwu Iron & Steel, to create Shandong Iron & Steel. The value of the deal was not disclosed, but the merger will make Shandong Iron & Steel China's third-largest steelmaker, based on an output of 22 Mtpy in 2006.

However, the majority of China's steel producers, big and small, continued to expand organically – supported in many cases by municipal authorities reluctant to enforce the consolidation of the industry because they fear the impact on local employment and taxes. In 2006, the top 15 steelmakers accounted for 43% of China's total output, down from 48% in 2004, showing that production is becoming more, not less, fragmented.

One recent example illustrates the nature of the problem. In December 2005, Wuhan Iron & Steel agreed to pay $805m for a controlling stake in Liuzhou Iron & Steel. But the management of Liuzhou Iron & Steel subsequently objected to the deal, arguing that it was motivated solely by the desire to win central government approval to build a new steel plant at Fangchenggang in southern China's Guangxi Province and did not represent a true merger. Such disputes have serious consequences because the company being acquired is then unwilling to cooperate, which can result in a significant loss of shareholder value.

There was little M&A activity among steelmakers elsewhere in the region either. In mid-2006, Australia's BlueScope Steel purchased a 19.9% stake in Smorgon Steel for $243m, in an attempt to block a merger with rival OneSteel. But all three parties have now agreed that BlueScope will acquire Smorgon's metal distribution business, while OneSteel buys its steelmaking assets, although the deal has yet to be approved by the Australian authorities.

Later in the year, Malaysian companies Kinsteel Berhad and Maju Holdings completed a long-planned strategic alliance. Kinsteel acquired 51% of the shares in Maju's wholly-owned subsidiary Perwaja Steel and 51% of the shares in its Gurun plants via a company called Perfect Channel, while Maju took up a 35% stake in Kinsteel. The $183m deal has created one of the largest fully integrated steel players in the region, with a total capacity of 4.6 Mtpy. Egypt's Misr National Steel (MNS) also won a battle to buy the government's 82% stake in Suez Steel for $194m, when it outbid four short-listed international rivals and a consortium of investors from Egypt and the Gulf headed by private equity group Amwal.

Deal-making in Asia-Pacific's remaining metals sectors proved equally slow. There were six deals collectively worth $480m in the aluminium sector, the only notable transaction being the $390m management buyout of Asia Aluminium Holdings, and seven deals with a disclosed value of $594m between companies producing other metals. In May 2006, Gulf Investment Company bought Companhia Vale do Rio Doce's 50% stake in the Bahrain-based Gulf Industrial Investment Company, which produces iron ore oxide pellets, for $186m. (It already owned the remaining 50% of the shares.) Soon afterwards, Evraz announced plans to buy a 79% stake in the South African Highveld and Vanadium for $648m. It bought 24.9% of the shares in July 2006, but was forced to wait for clearance from the European Commission in February

Figure 11: M&A Activity in Asia-Pacific

	2006			2005		
	Steel	Aluminium	Other Metals	Steel	Aluminium	Other Metals
Domestic						
Number	27	3	2	32	9	7
Value (US$ million)	2,081	33	187	1,984	276	51
Cross-Border						
Number	12	3	5	11	5	8
Value (US$ million)	20	447	407	1,077	420	608

Sources: Bloomberg, mergermarket, Zephyr and PricewaterhouseCoopers analysis
Notes: Values of cross-border deals are assigned to companies acquired. Values of deals taking place in Africa have been assigned to Asia-Pacific,

2007 before completing the transaction. And in August 2006, Japan's Mitsubishi Materials Corporation spent $187m on a 9% stake in Mitsubishi Shindoh, which makes copper metal products.

Central and South America

The Central and South American metals industry saw 12 deals jointly worth $851m take place in 2006, compared with 13 deals jointly worth almost $1.4 billion in 2005 (see Figure 12). Almost all of these transactions involved steelmakers. In April 2006, Arcelor reinforced its long-standing commitment to Brazil with the $407m acquisition of a further stake in Acesita.

In November 2006, Brazilian steelmaker Gerdau also purchased a majority interest in Peruvian steelmaker Empresa Siderúrgica del Peru (Siderperú) for $203m. It plans to invest another $100m in Siderperú over the next five years to upgrade the company's production technology and environmental protection facilities. Gerdau simultaneously announced that its Spanish subsidiary, Sidenor, would buy Spanish specialty steel producer GSB Acero for $143.2m. The deal was completed in January 2007, and Gerdau is now in the process of buying out the minority shareholders in Aços Villares, in which Sidenor had a 58% stake.

Meanwhile, Brazilian mining giant Companhia Vale do Rio Doce (CVRD) bought BHP Billiton's 45% stake in Brazilian aluminium smelter Valesul Aluminio for $27.5m – in the only notable transaction to take place in the Latin American aluminium sector in 2006 – giving it control of the entire firm. The move has increased CVRD's downstream aluminium production facilities and is part of a long-term strategy to expand its mineral portfolio beyond iron ore, which currently accounts for about 75% of the company's revenues.

Conclusion

In short, 2006 was another busy year for the global metals industry – and 2007 looks likely to see many more companies change hands. The merger of Arcelor and Mittal Steel, which dwarfed every other transaction that occurred, will almost certainly trigger other major deals in the steel sector, while the three-way deal between RUSAL, SUAL and Glencore International could also spark another bout of M&A activity in the aluminium sector. The global metals industry remains as fast as ever on its feet.

Figure 12: M&A Activity in Central and South America

	2006			2005		
	Steel	**Aluminium**	**Other Metals**	**Steel**	**Aluminium**	**Other Metals**
Domestic						
Number	3	1	0	3	0	0
Value (US$ million)	53	28	0	836	0	0
Cross-Border						
Number	7	1	0	9	0	1
Value (US$ million)	770	0	0	310	0	220

Sources: Bloomberg, mergermarket and PricewaterhouseCoopers analysis
Note: Values of cross-border deals are assigned to companies acquired

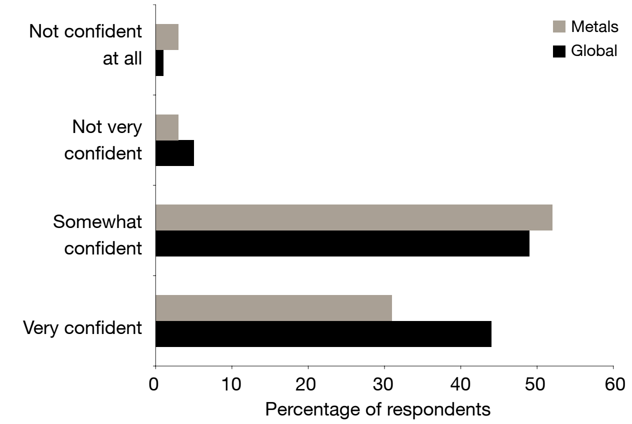
Globalisation:

how chief executives in the metals industry view the changing business landscape

In late 2006, we interviewed nearly 1,200 business leaders in 16 industry sectors around the world – including 29 chief executives from the metals industry – to find out how they are responding, as market forces rebalance the global equation. We asked those who participated in our survey how confident they were about the prospects for future growth; what plans they had for expanding abroad; how they thought the global landscape was shifting; and how they defined their own roles. We have identified some of the main differences between metals executives and their peers in other sectors below.

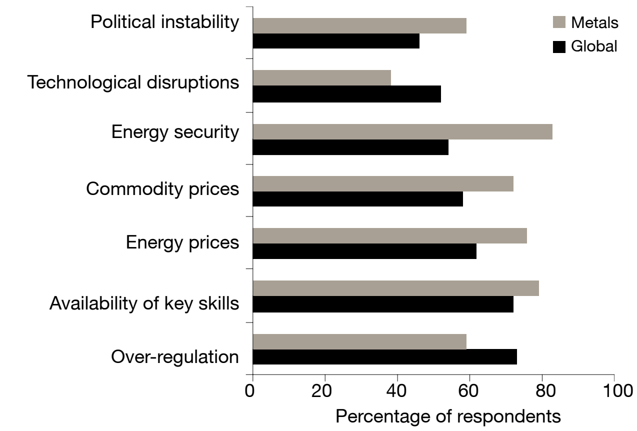
Business leaders in the metals industry are much less optimistic about the future than those in other industries. Only 41% are very confident about their companies' potential for revenue growth over the next 12 months, compared with 52% of respondents as a whole. The disparity is equally marked when they look to the longer term; only 31% of metals executives are very confident about the opportunities for revenue growth over the next three years, compared with 44% of our entire survey sample (see Figure 1 on page 18).

Figure 1: Metals Executives Are Less Confident than Those in Other Industries About Their Companies' Growth over the Next Three Years



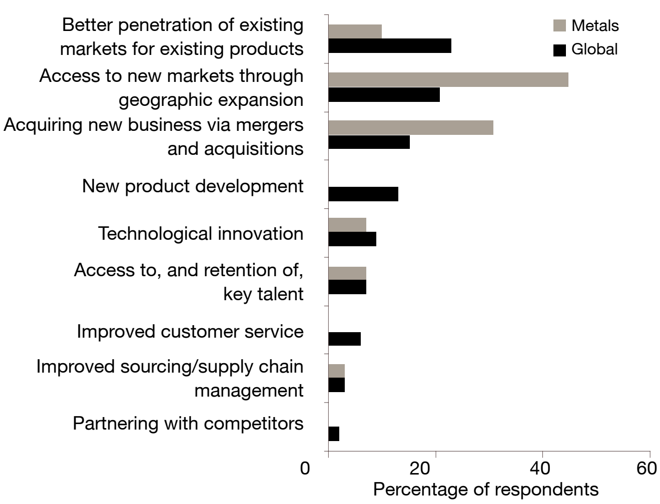
Source: PricewaterhouseCoopers10th Annual Global CEO Survey

Figure 2: Metal Executives Worry More About Energy Supplies, Energy Prices and Commodity Prices than Their Peers in Other Industries Do



Source: PricewaterhouseCoopers10th Annual Global CEO Survey

Figure 3: Metals Executives Believe Access to New Markets through Geographic Expansion Offers the Best Opportunity for Growth over the Next 12 Months



Source: PricewaterhouseCoopers10th Annual Global CEO Survey

So, what keeps metals executives awake at night? Our survey shows that, like business leaders in other sectors, they are anxious about getting the right human resources. More than 70% of all respondents said that they were somewhat, or extremely, concerned about the availability of key skills. However, chief executives in the metals industry worry substantially more about energy prices, commodity prices, energy security and political stability than their peers in other industries do. Conversely, they worry less about over-regulation and technological disruptions (see Figure 2). These differences are understandable, given that commodities and energy play such a major role in the metals manufacturing process. They also explain why more than half the metals executives we surveyed have expended a moderate or significant amount of effort in preparing for a sudden hike in energy or commodity prices, and securing their energy supplies.

When it comes to future growth, chief executives in the metals industry are looking abroad to a much greater extent than those in other industries. Forty-five percent of respondents believe that access to new markets through geographical expansion offers the most significant opportunity for growth over the next 12 months, compared with just 21% of our global survey sample (see Figure 3). Moreover, 31% of those we interviewed are planning to complete a cross-border merger or acquisition within the next year, compared with only 15% of respondents as a whole.

What is equally noteworthy is the extent of the interest in Eastern Europe. Fifty-six percent of metals executives said that they had either completed a merger or acquisition in Eastern Europe within the past 12 months, or were planning to do so within the next 12 months, compared with just 23% of our global sample. They also expressed considerable interest in Asia (and Vietnam, in particular) – although this is a region in which executives in other industries are likewise very interested (see Figure 4).

The vast majority (89%) of metals executives who had already completed a merger or acquisition said that their main reason for expanding abroad was to gain access to new markets or customers. Like their peers in other industries, they encountered a number of obstacles, including cultural challenges and conflicting regulations. But they were more concerned about unexpected costs; 50% of the metals executives we surveyed identified unforeseen costs as a problem, compared with just 29% of our entire survey sample.

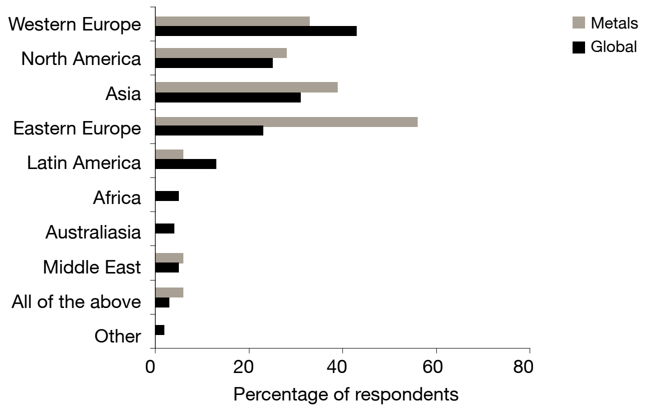
In fact, business leaders in the metals industry may be among those who are best qualified to comment on the challenges of moving abroad, since this is an area in which they have considerable experience. Forty-four percent of those we surveyed already source between 11% and 40% of their business from low-cost countries like Brazil, Malaysia, China and Ukraine, while 59% plan to do so within the next three years. Conversely, only 22% of our global sample source between 11% and 40% of their business from low-cost locations, and only 30% plan to do so within the next three years (see Figure 5).

Business leaders in the metals industry are also more cautious about the impact of globalisation than their peers in other sectors. They are more concerned about the adverse effects on society in the short term, and less confident about the benefits for both developed and developing markets, although more than half of those surveyed are still quite positive in their outlook (see Figure 6). Similarly, they are more concerned about preserving national control over strategically significant activities, and less convinced that globalisation has diminished cultural differences.

However, chief executives everywhere widely agree about the nature of their responsibilities in a more globalised world. More than 70% of those in the metals industry, and more than 80% of those in other industries, believe that one of their key tasks is to create a sustainable business environment. More than half of all respondents also recognise that engaging actively in social issues will be critical to their success in recruiting and retaining employees.

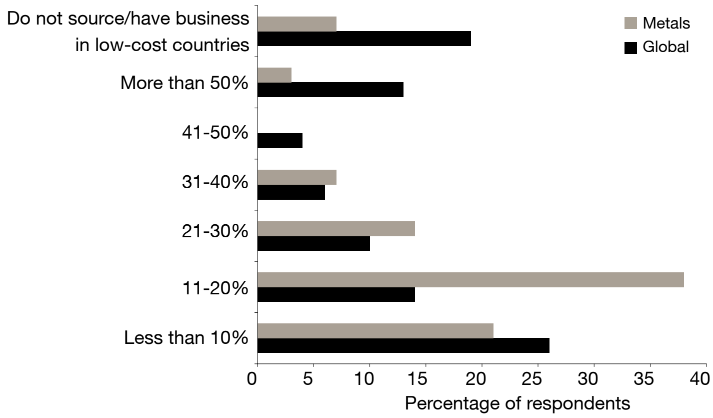
Our survey paints a broad picture of how business leaders think the global landscape is changing, and how they are reacting. It also highlights some differences in the attitudes of chief executives in the metals industry. However, it does not explain (and was never designed to explain) these divergences in perspective. We have therefore supplemented our findings by interviewing two of the most senior executives in the steel and aluminium industries, respectively.

Figure 4: Metals Executives Are Much More Interested in Expanding into Eastern Europe than Their Peers in Other Industries



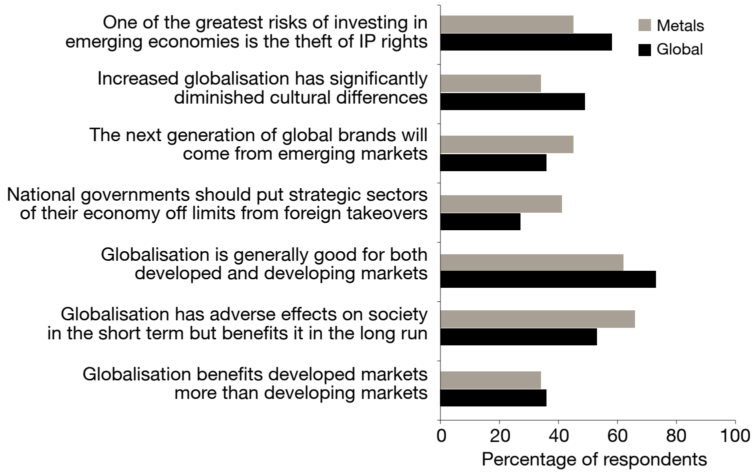
Source: PricewaterhouseCoopers10th Annual Global CEO Survey

Figure 5: Metals Executives Plan to Source a Much Higher Percentage of their Business from Low-cost Locations over the Next Three Years



Source: PricewaterhouseCoopers10th Annual Global CEO Survey

Figure 6: Metals Executives Are More Cautious About the Impact of Globalisation than Their Peers in Other Industries



Source: PricewaterhouseCoopers10th Annual Global CEO Survey

Interview with Daniel DiMicco, Chairman of Nucor

Jim Forbes talks to Daniel DiMicco, President and Chief Executive of Nucor, one of the largest steel producers in the US. Mr DiMicco joined the company in 1982 and became a director in 2000. He was elected chairman in May 2006, having served as vice chairman for the previous five years

Q: How do you think your role has evolved over the past two or three years?

DD: A chief executive's role doesn't change every two or three years. You have to adopt a long-term focus. If the way you approach your job changes every three years, you've either got serious problems or your industry has dramatically changed overnight – for better or worse.

When I first took over from Nucor's founder as chief executive, my challenge was to make a healthy transition and ensure that the employees understood that Nucor was not going to change its culture. I needed to help them understand who I was, what the vision for how we were going to go forward together was going to be – the challenges and opportunities. And over the last six years, we have been executing our strategic plan for growing the company, growing its earnings and growing profitability.

Today, we need to re-evaluate: "Should we stick with the strategy that we put together five or six years ago? Should we alter it? Do we need to focus on one area of our strategy more than another?" This is something we do yearly. How we grow and how we focus has changed because of our current size. We've got operations in more than the US to deal with now, and we've just made a major acquisition in Canada. So, we're evaluating our international strategy more than we were five years ago – what directions to take and what risks we are, or aren't, willing to accept.

The other thing that's a little different today than it was a few years ago is when you grow as much as we have, you have to be sure you're communicating and demonstrating the corporate culture in its entirety and transplanting it into all these organisations that you've built or grown or acquired. As you get bigger you have to have the right focus on bringing the right people in for tomorrow and developing tomorrow's leaders so that the company has a successful lifetime ahead of it.

Q: Looking ahead, what legacy would you like to leave?

DD: What I'd like to leave is a company whose historical culture is intact, whose employees still love it, come to work every day and want to help the company and themselves be successful with the right tools and resources to do their jobs. I would like to leave a history of success and a new leadership team capable of continuing Nucor's winning ways.

Q: The results of our latest global CEO survey suggest that chief executives in the metals industry are less confident about the prospects for revenue growth than those in other sectors. What do you think might explain this?

DD: The metals industry has had a very difficult history. Most recently, it has been both profit-driven and market driven; but in the past it's harmed itself, and been harmed by governments, through overbuilding and overcapacity. We've had an anomalous amount of growth in one area of the world – China. And it weighs heavily on metals industry executives, because China has taken us back to a world that is 40%-plus dominated by government-owned industries.

The Chinese government has built the equivalent of the US steel industry in each of the last two years alone. It now has over 500m tonnes of capacity. That's almost half of global steel production, all government-owned, government-subsidised and government-supported. It's one thing to be competing with another shareholder-owned, profit-driven, market-driven steel company. It's a totally different thing to be competing with City Hall, and one the size of the Chinese government.

It's an issue the entire global steel industry is working very hard to deal with. All the consolidation that has taken place is a good thing, and it's having a very positive impact on the profitability of the industry. Nucor has benefited as a low-cost, highly productive producer. But all the progress the industry has made could quickly be undone if the governments of the world allow China to flood the world with steel. And the sad thing is it's actually the most expensive place in the world to make steel.[5]

[5] Ed. Note: Mr DiMicco elaborated on this point in a recent testimony before the US Senate Committee on Finance. He argued that the Chinese steel industry is heavily subsidised via government-inspired equity investments, cash grants and loan write-offs; the non-enforcement of the environmental laws; and the manipulation of the Chinese renminbi to keep Chinese imports artificially cheap. Without these advantages, the true costs of making steel in China would be very much clearer. For further information, see "Opportunities and Challenges in the U.S.-China Relationship" (March 27, 2007). Available at http://policycouncil.nationaljournal.com/EN/Forums/American+Iron+and+Steel+Institute/77f1fd15-7be1-409a-8664-ba01d80d3fe2.htm (accessed on May 15, 2007).

Q: What short- and long-term prospects do you see for the steel sector?

DD: I think the overall prospects are very bright. We believe that, absent global distortions – that, is China – global growth is going to be very strong. It'll have ups and downs, no doubt about it, but there's a lot of development still to be done, and that's lots of opportunities for companies like ours.

Q: Do you plan on accomplishing any international M&As in the next 12 months?

DD: Our strategy, internationally, has been to form joint venture partnerships. We're willing to acquire companies, but we've seen too many acquisitions end up destroying the companies concerned. That doesn't mean we wouldn't take advantage of an opportunity if it came along. We've just completed a $1-billion acquisition – our largest ever – of the Harris Steel Group in Canada. The risks in Canada are significantly less than they are elsewhere in the world. We've also looked at doing things in Russia and China, but we've decided to forget it. They're both countries in which the government's in control of what's going on and isn't going to let you buy in, except as a minority investor.

We've done a very, very good job of acquiring and building downstream customers in our long-products business. Harris is part of that. We've also done a little bit on our flat-rolled business. But we're mainly focusing on using the new technologies we already have and those we're developing to create a lower-cost operation and, maybe, develop steel with some unique qualities other companies can't offer. We're also still forming successful partnerships around the world, and there are plenty of opportunities out there, but, by definition, that's a longer-term process.

Q: We noted in our survey that chief executives in the metals industry were especially interested in moving into Central and Eastern Europe. Why do you think they find the region so attractive?

DD: Eastern Europe does have a lot of talented, educated people. Yes, there are raw material issues, but there are cheaper assets available in the region. I think people will still be willing to go there and build new assets and facilities. Demand will also grow, because those areas are going to develop. Their infrastructure is outdated; it needs to be completely rebuilt. Russia has started to rebuild and it's consuming a lot more steel than it has been, since the collapse of the Soviet Union. It's building new steel mills for the first time, and mostly for domestic consumption.

Q: What do you think are the biggest risks in investing in emerging countries?

DD: It goes to our philosophy of partnering, as opposed to jumping in with both feet. We feel the greatest threat that any company has, and certainly any executive team has, is letting its ego get the better of it and jumping in before it should.

Q: To what extend do you think the steel industry is already global?

DD: Steel is made everywhere and shipped everywhere. So, from that standpoint, it's a global industry. It's also global in the sense that steel companies have been consolidating on a global basis, building and buying steel operations all around the world.

Q: Are there any truly global customers?

DD: Absolutely. That's one of the things driving the consolidation and globalisation of the steel industry; most of its big customers have already gone global. The automobile and oil companies did it years ago. Equipment manufacturers have done it. Household manufacturers are doing it. As the rest of the world develops, customers are going everywhere. Part of the drive behind the global consolidation of the steel industry consolidation has been to acquire a stronger negotiating position with its multinational customers.

Q: To what extent would you say Nucor is operating on a global basis?

DD: Right now, Nucor is the 8th- or 9th-largest steel producer in the world. So, today, and for the last several years, we've been in the top tier, from a volume standpoint. We've certainly been in the top tier in terms of profitability. We manufacture and purchase raw materials globally but we are only opportunistic marketers globally, as most of what we produce is consumed in the NAFTA region.

Q: What are the key challenges of globalisation?

DD: Steel is a riskier business in other countries than the US for a lot of reasons: everything from security, to people, to financial risks associated with currency issues and economies that aren't as stable. You can't be blind to such risks. But it doesn't mean that you can't be successful in those countries. It just means that there are additional business risks and costs of doing business as well as political issues, finance and stability issues. One of the biggest challenges is to keep trade fair and balanced because, if it is destructive, as it has been for many industries, then people will lose trust in global trade and rebel against it. Trade must be rules-based and rules-enforced to keep it working.

Q: Most of the metals executives we surveyed believe globalisation has adverse effects on society in the short term but benefits it in the long term. What is your opinion?

DD: I think tremendous damage can be done in any situation where there's a very rapid move to extremes. For example, the application of distorted free-trade concepts has allowed some of our trading partners to rig the system in their favour, and that has had a negative impact on US manufacturing. Some people would argue that the world's going to develop, there will be more stability and that will benefit the US. Others would argue that if the US doesn't make anything for itself, it can't fend for itself, and that could be negative for the US culture, economy and way of life. You could argue that around the world, in different areas, too. There are always winners and losers, and those winning and losing entities can be affected disastrously by extremes.

What we have today, in some cases, are extremes that need to be brought back into balance. Things need to move in a global way, no doubt about it, but they need to grow in a controlled fashion – a fashion that makes sure people play by the rules and that the rules represent all the players in a fair way. This is not being done today, despite the best efforts of the World Trade Organisation and others because, in most cases, people aren't being held accountable. Our own government has not been as vigilant here as it should have been – not by a long shot.

Q: What about the rules on pollution and adherence to environmental standards?

DD: China has built a steel industry that does not abide by any environmental controls, period. For a developing nation to be exempted, when all the manufacturing businesses and all the pollution-generating activities are being moved there...you're kidding yourself! The last time I checked, CO2 was a global issue. All the global warming issues that are taking centre stage in Washington and with governments around the world will be for nil if the whole world doesn't participate in it and isn't held accountable for doing so. Chinese wheat gluten, anyone?

Q: Do you think national governments should put constraints on what can and cannot be acquired?

DD: Yes, depending upon the situation. Governments shouldn't tamper with public companies that are acquiring other public companies. If they're truly market-driven organisations, playing in the world marketplace, playing according to the rules of the game, you have to let markets work, and that includes companies buying other companies, or assets, in your country.

Where you should draw the line is on areas of national security, providing technologies to unfriendly or potentially unfriendly countries. This is where I would draw the line even harder – on government-owned companies buying US companies or European companies, or any companies that are playing in the private-enterprise, shareholder-owned marketplace. Governments should not be allowed to do that.

Q: Do you think the current pattern of globalisation brings new corporate responsibilities? And, if so, what sort of responsibilities?

DD: Absolutely. For instance, a company in the US has to abide by certain labour practices, environmental regulations and accounting principles. If you go to a country that doesn't have those standards, you have a right – a responsibility, even – to make sure that positive standards are put in place to provide a safe, healthy environment for the people living there.

Governments can certainly make it difficult or impossible for you to do so, but you should nonetheless try. If your company is a culturally-centred, people-centred organisation, doing the right thing, being ethical, and working with integrity, you do those things, no matter where you're working, and you do them to the best of your ability, even if the government won't require you to do it. At the end of the day, you're working to make sure that the people who are part of your team are being treated in the same way you would want to be treated.

Do I believe that it's okay for a company to move its pollution-generating operations to a part of the world deliberately, because it doesn't have those requirements? I think that's a gross abuse of its responsibility as a corporate citizen in the world. But, if you go there, and you implement all the latest technologies that you would implement in your home country, then there's nothing wrong with that. That's being responsible.

Interview with Michel Jacques, President of Alcan Primary Metal Group

Michel Jacques was appointed President and Chief Executive Officer of Alcan Primary Metal Group in October 2006. He is also a Senior Vice President of Alcan, a global manufacturer of aluminium and packaging materials. Here, he discusses the key issues concerning aluminium executives with Jim Forbes

Q: How has your role changed over the past few years?

MJ: The reality today is that we all have much more to do. We get much more information than we can handle and we're facing some issues that are completely new to us. The world is getting smaller and more complex. Speed is of the essence. As a CEO, I think the first thing I've got to do is communicate our priorities, key issues and opportunities to the organisation. My job is to align people in the organisation around all these things and win their commitment. As a CEO, you can work on the old command-and-control system for a while, but it doesn't take you very far.

Q: What kind of legacy do you want to leave behind?

MJ: I hope I will leave behind a high-performance organisation that reconciles operational excellence with growth: one that can operate on a global basis while being well-connected with the community where we operate; one that has a sustainable business model which offers reasonable and satisfactory returns to our shareholders, but also has a positive social and environmental impact. We want to contribute more than we take out.

Q: Our latest global CEO survey shows that metals executives are less confident about the prospects for revenue growth than executives in other sectors. Why do you think that might be?

MJ: Ours has traditionally been a cyclical industry. We're currently enjoying some good times. Demand is still relatively good in North America. Emerging countries like China and India, and to some extent, the Middle East and Eastern Europe, are also enjoying above-average growth rates. We're higher in the cycle, in terms of pricing and demand, than we've ever been.

But many people would say, "History tells us we're not going to stay here forever," so they expect the market to turn down again at some point, with lower prices and lower demand. It's also the case that because we've been enjoying good times in the metals sector, the cash flow is there to fund capacity additions, and everybody may invest at the same time. The risk, of course, is that, when all this new capacity comes on stream, there could be excess capacity and prices would go down.

Q: Everybody touts China's low metals consumption per kilo per capita. Do you think this is going to take longer than most people believe to change?

MJ: We see statistics that show China is on a very similar development path to the one Japan and Korea followed. I think the Chinese economy will continue to grow. And as it grows, as it industrialises, so its consumption of metals will increase. It will need to invest in transportation and leisure activities, for example. I think those are markets where we will see increasing demand for metals, ours in particular.

Due to the huge size of its population and the rapid growth path that China has put itself on, I have more question marks about its ability to manage some of its social and environmental issues than its ability to manage its economic development – and they cannot be separated one from the other.

Q: Do you think the switching in consumption of different materials has stabilised or that there will be a continual flux?

MJ: I think this is a continuing process and a very, very healthy process. I can tell you that, even though aluminium is over 100 years old, we're far from having exploited all its possibilities. What's important is the "intelligent" use of materials – making sure you use the material in the best application. This is just a way of maximising the value of the resource. And it will continue.

Q: Are there any major changes that you foresee for the metals sector in the near- and long-term?

MJ: Climate change, climate change, climate change, and the impact it will have on the energy market and extracting industries. As a metal processing company, or metal producing company, I think we're going to be hit twice. First, our own processes will be subject to more and more scrutiny from an environmental point of view, and in terms of their impact on the climate. Secondly, in the metals industry, we're large consumers, producers and generators of energy, and power generation is by far the biggest contributor to CO2. On the other hand, the advantages of aluminium during the use phase, and its unique ability to be recycled almost infinitely, will have a greater chance to be recognised.

Q: Do you think the metals sector gets enough credit for the fact that its products can be recycled?

MJ: Aluminium can be recycled almost forever, if we're careful about not letting it go into a landfill. So, if we can optimise the recycling and eliminate the waste going into the landfills, we'll be in great shape, and that could partly be a solution to the climate change issue. This applies, maybe to a lesser degree, to most, if not all, metals.

Q: Do you plan on completing any cross-border M&As in the next 12 months?

MJ: We're looking at many opportunities. However, it's not a life-or-death decision for us and we're not hanging our future on it. If the right opportunity comes, great! If it doesn't, we'll continue to grow organically. We have a number of projects which are entirely our own, and a number which we are considering with partners. So, rather than grow solely through acquisitions and buying companies, we're also looking at joint ventures in new countries.

Q: Most people would agree that some steel companies have bought government assets that are outdated. Do you think it's better to buy a greenfield site and get what you want?

MJ: The notion of "getting what you want" in the mining and natural resources industry is a non-existent one. It's all about managing all the diverse stakeholders and being able to continuously meet the challenge of being profitable and meeting their expectations.

The aluminium industry has gone through rapid transformation and consolidation in the last 20 years. At the same time, we've seen the emergence of new competitors from emerging countries where governments are active participants. Each part of the world represents a different challenge and we are prepared to put our best effort into growing where it makes sense, whether it is through greenfield or brownfield expansion.

Q: Is it fair to say that the aluminium sector is 15 years ahead of the steel sector on the consolidation path?

MJ: The aluminium industry is relatively small, compared with the steel industry. We started off with a smaller base, a smaller number of companies. I think consolidation took place rapidly in more developed countries, while fragmentation still prevails in many emerging markets. And, since the deals in aluminium are generally smaller, they don't attract the same attention as the large steel mergers.

Q: The metals executives we surveyed were especially interested in moving into Central and Eastern Europe. Why is the region so attractive to the industry?

MJ: I see Central and Eastern Europe as an important region for a number of reasons, including the fact that there are resources there – mineral deposits and raw materials. There's energy, generally speaking – certainly in Russia and other countries in Eastern Europe. So, some of the fundamentals as to why we would want to have a metals industry are there. There's also growth. This is a relatively rapidly growing area; it's certainly growing faster than Western Europe or North America.

Q: Given your experience in some of these emerging countries, what do you see as the top risks?

MJ: I would say the greatest pitfall is not doing our homework properly, looking at it from an outsider's perspective and making decisions based on the wrong criteria. This has nothing to do with our ability to adapt to the culture. We've got to be able to find people who can bridge the two cultures. And it goes both ways. Very often, you see your clients or suppliers, or your relationship with the other stakeholders, getting muddled because people don't work or behave the same way. A company that is able to manage diversity and is looking out for diversity because it enriches the discussion and pool of knowledge is well-positioned.

Q: Where is Alcan in terms of the globalisation process?

MJ: If you're asking us if we're global, of course we're global, because we operate in about 60 countries. Now, are we operating globally? Yes and no. You have to be careful not to manage globally what shouldn't be managed globally. There are still very few markets that are truly global today. You have products that travel, but that doesn't mean they're bought in exactly the same way everywhere. They're not priced the same way everywhere. The decisions to buy from you are not made in the same way everywhere. So, on the one hand, yes, you want to leverage your scope, your scale, but, on the other hand, you have to adapt locally. You've got to deal locally. You've got to have a local identity.

This is one of the challenges we have. We want to have a global view, and see where the opportunities are, have access to information wherever it is, and make choices as to which markets we want to serve. But then we want to be very local in our approach to these markets, and have people who speak the language, who understand the culture, how things are done in a given country.

Q: To what extent are you operating on a global basis?

MJ: We have people everywhere. We have people in China, Russia, South America, Australia, the Middle East and South Africa and so on. We have an operation that supports a truly global business. But do we have enough people with the right competencies and experience to deal with problems from around the world? We still have too few.

And do we have the right information systems, right routines and right processes? Do we have the right culture? Not yet. This is probably a harder challenge and, again, you need to invest a lot in your company language, in your vocabulary. You need to look at the routines we use to work together, and adapt that to local conditions. I think there is a huge amount of work to be done.

Q: Is it easier on the operating side? Are your best practices, whether you're running a smelter here, in China, the US or Europe, easier to communicate than the commercialisations?

MJ: Yes, the technical aspects are easier. If you have a solution to a technical problem, it's much easier to transfer than the administrative and management processes. But that's where most of the money is spent today.

Q: What, in your view, is the key challenge of globalisation?

MJ: Globalisation is a natural phenomenon – it's not new. It's just been accelerated because of information technology. Also, some former borders have come down, in China and Russia particularly. Globalisation is the acceleration of a process that began thousands of years ago, when people started to trade. The value of this process is that it leads to a better use of resources. It's about letting people do what they do best. We started on a village basis, and then a country basis, and then a continent basis, and then, because of our ability to move information around and our ability to make choices, the borders opened, so goods and services can flow.

Q: Do you see any other areas where globalisation can affect us and help society in the longer term?

MJ: If it's well applied, globalisation will lead to lower prices and more choices for the consumer. In the short term, the great difficulty – one we all face as leaders, as business managers – is the speed at which we have to globalise, and the challenge of managing the transition. When it makes sense to move activities we've historically conducted in Canada somewhere else, that's fine. But the immediate impact on the local community can be huge, and it affects our reputation as a corporate citizen. This is why we really have to make sure that we manage it properly, because it puts one of our key assets, our reputation, at risk.

Q: Do you think that governance, environmental standards and so forth in the rest of the world will ultimately rise to the same level as in Canada and the US?

MJ: Absolutely, but this is something we can encourage. It's also something society has to promote. It's one area where the political leaders of the countries concerned have to work with their counterparts in other countries to get to a level playing field as quickly as possible. You cannot have globalisation that's based only on the flow of goods and services. It's got to include the flow of standards and general conditions in which you operate. Otherwise, it's not globalisation.

Q: Do you believe that national governments should put constraints on what can be acquired?

MJ: This is one area where the government has to induce changes in policy at the international level. The leverage we have today is through access to our markets and companies. But it has to be reciprocal: "You can buy our company; we can buy yours. You want access to our market? We want access to yours. You want your products to enter our market? Well, here are the conditions – environmental and social – to be satisfied."

Q: Do you think competition is a better way to deal with the ins and outs of products and government barriers?

MJ: I don't think tariffs are a great answer. They're a stopgap. You can't support free trade and globalisation on one day and impose tariffs on the next.

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