

Engineering growth

Fourth-quarter 2009 global engineering and construction industry mergers and acquisitions analysis

Innovation: A course to recovery



Welcome to *Engineering growth*, PricewaterhouseCoopers' quarterly analysis of mergers and acquisitions (M&A) in the global engineering and construction industry. In addition to a detailed summary of M&A activity in the fourth quarter of 2009, we supplement this issue with a special report that discusses innovation as a course to recovery. It highlights the many faces of innovation and the related opportunities for resolving business strategy issues, improving efficiencies, and accelerating growth.

Special Report: Building economic recovery with innovation

When the world entered the worst recession since the Great Depression, it was as if the global economy had lifted a veil on risk and exposures, forcing companies to adopt a “back to the basics” approach to business. As the economy recovers, companies hope to shrug off their “hunker down” mentality and find ways to compete in an altered business landscape. The question is: Which engineering and construction (E&C) companies will be first to get back in the game, and how will they do it?

Largely, the answers will revolve around innovation and how well E&C companies optimize acquisitions to achieve better penetration in existing markets and develop new products. Winners also will include those E&C companies that look inward to achieve the efficiencies necessary to cut and sustain costs, improve performance, and compete in an increasingly automated business environment.

Case in point, Bechtel, a leading E&C company, is featured in a recent PricewaterhouseCoopers *Technology Forecast* report on cloud computing. The article describes how Bechtel is using cloud computing to transform its information technology (IT) organization so that it more aptly responds to business needs.

According to Christopher Wasden, a PricewaterhouseCoopers (PwC) strategy and innovation specialist, unless technological breakthroughs have economic value, they are, from a business perspective, “simply novel and ultimately useless.”

“Simply put, that which is creative and new becomes innovative only when it creates value—that is, when people are willing to pay for it,” Wasden said in the fall 2009 edition of the PwC publication, *View*. To harness innovation and make it work, Wasden explained, requires an understanding of what drives and sustains it. Innovators need something to cause them to react—something Wasden called “tensions.”

The many faces of innovation

Many industries have been transformed because of innovations involving advances in technology—automation, virtualization, digital transformation, microelectronics, and so on. Consider the efficiencies gained by the financial services industry with the advent of electronic trading systems, or

how travel websites have revolutionized airline and hotel booking. No wonder US-based and global E&C companies are embracing innovative ways of doing business and developing products and services. According to PwC’s recently released *Manufacturing Barometer* survey, 65 percent of respondents intend to increase operational spending over the next 12 months. The top five areas slated for an increase in spending are new product or service introductions (37 percent), research and development (37 percent), geographic expansion (27 percent), business acquisition (23 percent), facilities expansion (22 percent), and information technology (22 percent). The quarterly report interviews senior executives from large, multi-national manufacturing companies including producers of construction materials and building components, as well as commercial and residential builders.

Some of the impetus—or “tension”—behind the E&C industry’s interest in innovation revolves around climate change, green construction, and a need to mix hardhats with technology to improve construction quality and reduce costs. In response to climate change, E&C companies are building energy-efficient homes and commercial buildings, or refurbishing buildings to improve energy efficiency. As state and local governments receive economic stimulus funding for more innovative programs relating to this, the Shaw Group, a leading provider of engineering and construction support services, recently announced that it had entered into three contracts to help state and local governments with energy program design and management services.¹

At the root of almost all initiatives that address climate change is some sort of construction—from installation of smart-grid systems for utility companies and building storage facilities for carbon dioxide emissions, to the construction of fossil fuel and nuclear power plants. For example, the Shaw Group, recently was awarded a contract for a feasibility study by American Electric Power to support the first phase of a project to increase the power output at the Cook Nuclear Plant near Bridgman, Michigan.²

Meanwhile, Bechtel is constructing two coal-fired steam turbine generating units on the west shore of Lake Michigan. Rather than using cooling towers, which send heat into the air, the power plant features new technology that uses a 9,200-foot tunnel that is 26 feet in diameter to transport water from Lake Michigan into the plant’s condensers and then back to the lake, carrying the heat from the turbine exhaust with it.³

¹The Shaw Group, “Shaw Helps State and Local Governments Make Smarter Energy Choices,” Feb. 3, 2010

²Factiva: Shaw to perform power uprate study for AEP’s Cook Nuclear Plant, Jan. 18, 2010

³Bechtel website

Innovation and the nuts and bolts of day-to-day business

In addition to seeking opportunities to build more efficient facilities or use new technology, E&C companies are using innovation to change the way they run their businesses. Computer modeling and other software applications help E&C companies improve building designs and save operating costs.

Although e-business has yet to revolutionize the E&C industry, it is gaining more influence in the areas of procurement, capacity planning, logistics, and electronic data interchange. It could also play a role in the relationship with subcontractors and be the key technique for facilitating partnering with subcontractors and customers.

Companies could also potentially leverage innovative solutions to resolve business strategy issues, including:

- Revenue growth
- Cost containment
- Inventory optimization
- Strategic pricing

Innovative technologies for resolving those issues include:

- Expansion of business intelligence software
- Growth in manufacturing intelligence
- Business model integration
- Wired to wireless technology transformation to cut operation costs

All E&C companies are interested in ways to save operating costs by automating routine processes. Rather than move routine systems off-shore, companies are starting to eliminate the process through automation. Examples include automation of back-office processes such as procurement, invoicing, and payroll through the implementation of systems such as SAP.

Construction contractors also use industry-specific software applications to make the proposal development process more efficient and to monitor project performance. Additionally, today's construction machinery and equipment often features computerized controls that enhance the precision of functions such as digging, or lifting and placing

materials. Through the use of computer technology, E&C companies are also able to reduce costs and minimize errors in an industry that depends on correct scheduling, coordination, and strict adherence to technical specifications.⁴

Innovation, mergers, and acquisitions

Innovation plays a significant role in the acceleration of the M&A process. Companies with a high level of technology infrastructure are better able to integrate customer, product, and business data into an acquiring or acquired company. A company's technological innovations also potentially could render it attractive as a target. If acquired by a global company, the target company may gain an opportunity to market its innovations to a broader customer base and possibly to a wider geographical area.

M&A activity also plays a significant role in the acceleration of innovation. Because innovation is difficult, expensive, and requires a specific skill set, companies often find it easier, cheaper, faster, and more profitable to buy innovation through the M&A process.

Navigating the right path to innovation

What steps should E&C companies take to develop an innovation strategy? For some organizations, acquiring competitors is a way to open up new markets, accelerate international growth, or improve distribution networks. And as the economy continues to improve, companies that act quickly on acquisition opportunities will secure the most attractive deals in terms of valuation with the most potential to stimulate growth.

As the world emerges from the global recession, E&C companies that embrace and execute on the decades-old concepts of digital transformation and IT innovation will be those that are able to change their game and succeed. The concepts are the same as they were 10 years ago, but because of the economic crisis and evolving environmental regulation, the touch points for where those concepts can be applied have changed.

Stanford economist Paul Romer's famous quote was, "A crisis is a terrible thing to waste." For an E&C industry hit hard by the global recession there appear to be ample opportunities to embrace innovation as a way to bounce back from a down economy and play a significant role in reducing greenhouse gas emissions.

⁴First Research

Perspective: Thoughts on deal activity in the fourth quarter of 2009

In our preceding edition, which analyzed the deal environment for E&C companies during the third quarter of 2009, we established a view that M&A activity had reached a turning point in the first quarter of 2009, and it continued to improve throughout the year. As the global economy was beginning to stabilize, we were cautiously optimistic that the deal environment would continue to exhibit improvement in the fourth quarter. Our analysis of fourth-quarter data reveals that the pace of deal activity continued to gain momentum, both in terms of deal value and volume.

Similar to overall M&A activity, large deal activity showed sequential improvement throughout 2009, increasing from two transactions in the second quarter to four during the fourth quarter. The most notable was Brazil-based Cia Siderurgica Nacional's (CSN) unsolicited tender offer to acquire the entire share capital of Cimpor Cimentos de Portugal SGPS SA (Cimpor), a Portugal-based manufacturer and wholesaler of hydraulic cements, for \$5.54 billion. If consummated, CSN's acquisition of Cimpor would create one of the world's largest cement producers and bolster CSN's exposure in emerging markets, as approximately 60 percent of Cimpor's revenue is generated in those markets.

Cross-border transactions historically have been a key driver of M&A activity. More recently, however, as many companies faced challenges operating in their domestic markets, the level of cross-border activity has weakened. Local market transactions increasingly fueled deal activity during the fourth quarter, continuing a trend that began earlier in the year. Contributing factors leading to the higher allocation of local market deals include strategies focused on minimizing risk and acquirers using M&A to build scale and density in familiar geographies.

Among the Brazilian, Russian, Indian, and Chinese (BRIC) economies, China continued to be a hotbed of deal activity, as both a target and acquirer location. Of the eight announced transactions for BRIC targets, six were in China. The global trend toward local market activity also pervaded the BRIC region, as all but one of the deals targeting BRIC companies were in-border transactions.

Looking ahead into 2010, although a global economic recovery is under way, some economists expect the recovery to be subdued while others believe a double-dip recession is probable. Credit availability may be less of a concern than it was during first-quarter 2009, but PwC believes its use in deal financing may still be limited because companies may use existing cash balances and avoid increasing financial leverage while visibility is focused upon sustainable revenue generation. Furthermore, as companies focus more on internal initiatives such as cash conservation, cost containment, and margin expansion, M&A may be a secondary consideration, given the significant level of financial backing, information technology, and human resources often required for effective and efficient integration. Nevertheless, some companies with stronger business models and cash positions will attempt to make deals. And, as equity markets continue to gain momentum, companies benefiting from stronger relative share prices may be in a better position to use stock as a financing mechanism in deal structuring.

Commentary

A solid finish to 2009

Sequentially, the fourth quarter finished on a strong note as the number and total value of deals showed healthy gains. While both figures still lag on a year-over-year basis, the difference for each continued to narrow over the course of the year. In terms of the number of transactions, the first, second, and third quarters of 2009 were 74 percent, 54 percent, and 19 percent lower than the corresponding quarters in 2008, respectively. This dropped to 13 percent for the fourth quarter. Similarly, with regard to total deal value, the first, second, and third quarters of 2009 were 82 percent, 44 percent, and 34 percent lower than the corresponding 2008 quarters, respectively, with fourth quarter 2009 just 11 percent lower than fourth quarter 2008. Although M&A activity is not generally seasonal, we believe year-over-year comparisons may be helpful in assessing the magnitude of a recovery in sector activity.

Deal activity by number and value of deals

Measured by number and value of announced deals worth \$50 million or more

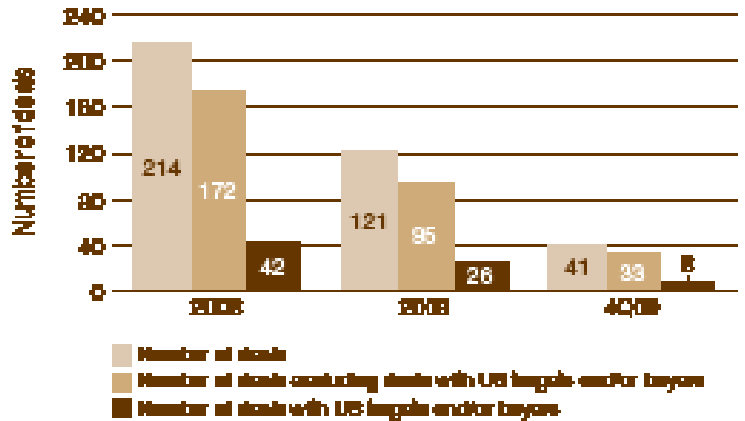
	2007				2008				2009			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Number of deals	64	62	67	53	57	68	42	47	15	31	34	41
Total deal value (\$ bil)	38.0	57.7	42.4	41.1	14.3	18.3	13.5	23.5	2.6	10.2	8.8	20.9
Average deal value (\$ bil)	0.6	0.9	0.6	0.8	0.3	0.3	0.3	0.5	0.2	0.3	0.3	0.5

Non-US-affiliated transactions fuel activity

Transactions involving US targets and/or buyers continued in the fourth quarter to play a part in driving M&A activity; however, most deals were attributable to non-US-affiliated transactions, which has been the case historically. During the fourth quarter, due to the announcement of several large transactions (transactions with a value of at least \$1 billion) in non-US markets, 90 percent of deal value was attributable to transactions that did not involve a US-based entity versus 78 percent in all of 2009 and 85 percent in 2008. In terms of the number of transactions in the fourth quarter, US-affiliated deals, at 20 percent of transactions, were in line with historical trends (21 percent in 2009 and 20 percent in 2008).

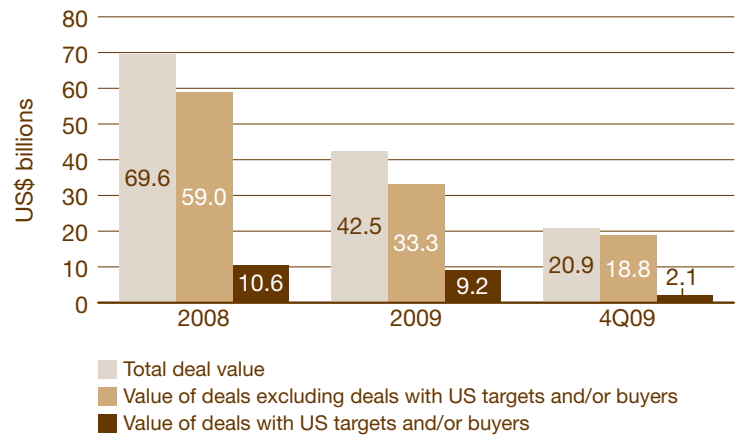
Deal activity by number of deals

Measured by number of announced deals worth \$50 million or more



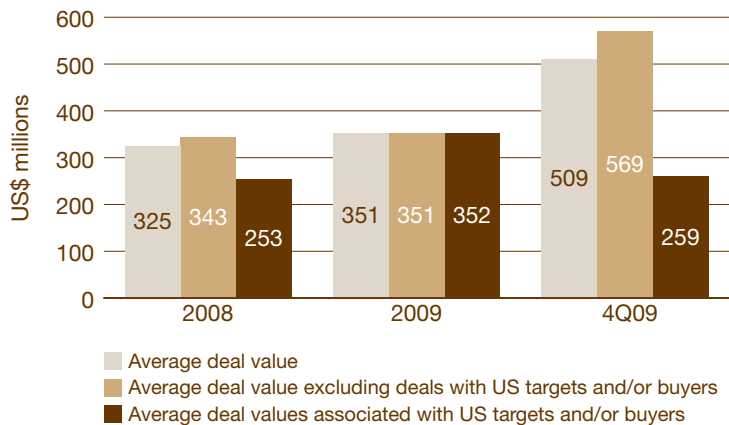
Deal activity by value of deals

Measured by value of announced deals worth \$50 million or more



Deal activity by average deal value

Measured by average value of total announced deals worth \$50 million or more

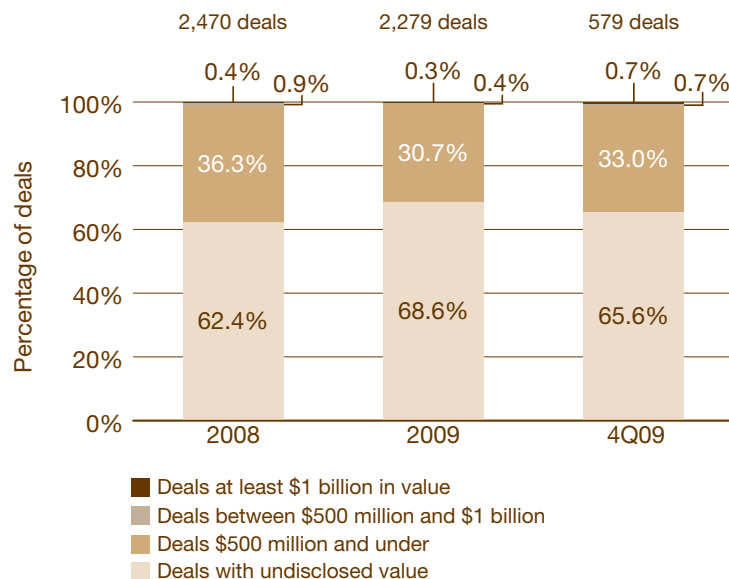


Average transaction value gets a boost from large deal activity

During the fourth quarter, the average transaction value benefited substantially from an influx of large deal activity. Of the seven large transactions announced in 2009, four were announced in the fourth quarter, most notably CSN's \$5.54 billion bid for Cimpor.

Deal activity by number and range of deal value (including transactions with undisclosed values)

Measured by number of announced deals



Most deals smaller in nature

The proportion of deals with values greater than \$500 million improved during the fourth quarter; however, the vast majority (98.6 percent) of transactions were either small (with a value less than \$500 million) or undisclosed. Notably, this tendency toward smaller deals in the fourth quarter is consistent with historical trends, as smaller transactions and those with undisclosed values combined have averaged approximately 99 percent of deals since 2008.

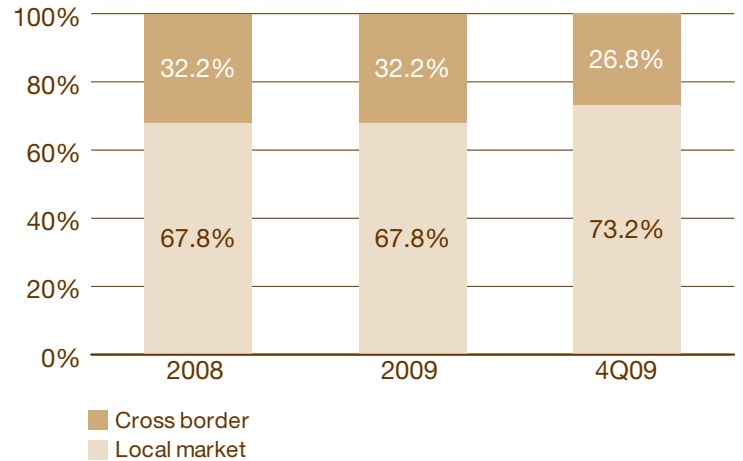
Although the number of transactions with values greater than \$500 million declined in 2009 (17 transactions) relative to 2008 (32 transactions), fourth-quarter trends suggest larger transactions are picking up as a considerable proportion (47 percent) of these transactions occurred in the fourth quarter. Into 2010, although most deals will be small or have undisclosed values, we believe deals over \$500 million will continue to increase marginally as global economic conditions improve.

Most deal activity confined to local markets

Historically, cross-border transactions have been a strong driver of deal activity. But recently, given the domestic market challenges many organizations are facing, the level of cross-border M&A has slumped. In 2008, 67.8 percent of transactions were classified as local market; in fourth-quarter 2009, local market transactions increased to 73.2 percent. We believe this trend is attributable to several factors, including the use of M&A to build scale and density in familiar geographies and as a risk-mitigation strategy because cross-border deals often involve greater risks than local markets.

Local market versus cross-border deals (all nations)

Measured by number of announced deals worth \$50 million or more

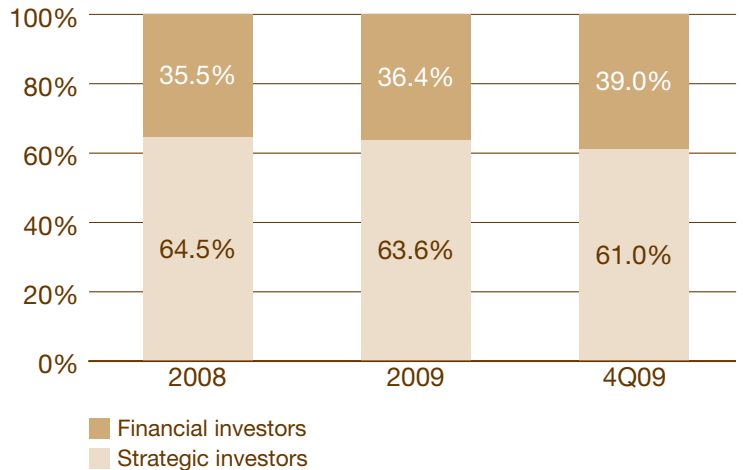


Financial investor: A changed landscape

Recently, private equity firms have faced considerable challenges in fundraising, which has limited their participation in deal activity. However, financial investors (i.e., private equity, pension funds, and equity income funds) as a group have continued to be integral in driving M&A in the sector. Although the level of financial investor activity has remained firm throughout the recession, the way that financial investors interface within the M&A environment has changed. As a result of the recession and tighter lending standards, the pace of leveraged buyout activity has slowed dramatically, and it has been replaced by an increase in the level of distressed transactions (i.e., creditors assuming ownership), asset divestitures, and minority-stake and incremental-stake investments. While the disruption of the credit markets may have been an underlying cause of the lull in leveraged buyout activity, other considerations such as regulatory changes and challenging economic conditions also have been factors.

Deal activity by investor group

Measured by number of announced deals worth \$50 million or more



Large deal activity intensifies in the fourth quarter

Similar to overall deal activity, large deal activity showed continued improvement throughout 2009, increasing from two transactions in the second quarter to four during the fourth quarter. Details of the four transactions announced during the fourth quarter follow:

1. As mentioned earlier in this report, in December 2009, CSN launched a takeover bid to acquire the entire share capital of Cimpor for \$5.54 billion. If consummated, the transaction would create one of the world's largest cement producers and bolster CSN's exposure in emerging markets, given Cimpor's substantial presence in those markets. In early January, Cimpor's board of directors rejected the bid, asserting that it significantly undervalued Cimpor; does not offer a premium to shareholders; and would jeopardize Cimpor's development. Although its bid was rejected, CSN could seek to deal exclusively with Cimpor shareholders.
2. In November 2009, an investor group, comprised of Canada Pension Plan Investment Board and Ontario Teachers' Pension Plan of Canada, launched an unsolicited tender offer to acquire the remaining 74.52 percent interest, or 961.29 million ordinary shares, which it did not already own, in Transurban Group, a Melbourne-based owner, operator, and developer of electronic tolling and other intelligent transport systems, for \$4.59 billion. Although the group's bid was unsuccessful, it may foretell the optimism that financial investors flush with cash see in certain markets, such as infrastructure and real estate.
3. In December 2009, Korea Development Bank acquired a 50 percent interest plus one share, or 160.02 million ordinary shares, in Daewoo Engineering & Construction Co. Ltd., a Korea-based provider of E&C services, from Kumho Asiana Group, for a consideration of \$2.47 billion. The sale provides the financially troubled Kumho Asiana Group with much-needed cash to pay its creditors.
4. In December 2009, US-based Bucyrus International Inc., a world leader in the design and manufacture of high-productivity mining equipment for the surface and underground mining industries, acquired the mining business of Terex Corp., a US-based manufacturer of construction equipment, for a consideration of \$1.3 billion. The transaction is expected to broaden Bucyrus' product line and expand its geographic reach.

Large deals in 2008

Month announced	Target name	Target nation	Buyer name	Buyer nation	Status	Value of transaction in US\$ bil.	Category
Dec	Itinere Infraestructuras SA	Spain	Pear Acquisition Corporation SL	Spain	Completed	7.93	Construction
Dec	Grupo Ferrovial SA	Spain	Concesiones de Infraestructuras de Transporte SA {Cintra}	Spain	Completed	4.00	Construction
Jul	Xella International GmbH	Germany	Xella International GmbH SPV	France	Completed	3.18	Nonmetallic minerals manufacturing
Jul	Cegelec SA	France	Qatari Diar Real Estate Investment Co QSC	Qatar	Completed	2.96	Engineering services
Dec	Itinere Infraestructuras SA	Spain	Pear Acquisition Corporation SL	Spain	Completed	1.36	Construction
Mar	Cie De Saint-Gobain SA	France	Wendel SA	France	Completed	1.22	Nonmetallic minerals manufacturing
Apr	Safety-Kleen Europe Ltd	United Kingdom	Warburg Pincus LLC	United States	Pending	1.12	Construction
Jan	INVIN SL	Spain	Investor Group	Spain	Completed	1.05	Construction
Apr	Eiffage SA	France	Groupe Caisse des Depots & Consignations {CED}	France	Completed	1.01	Construction

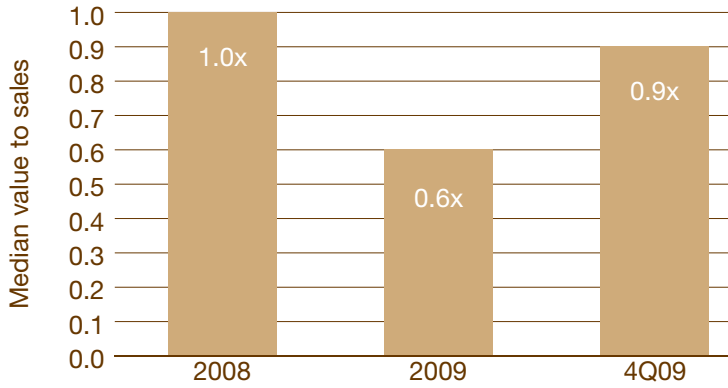
Large deals in 2009

Month announced	Target name	Target nation	Buyer name	Buyer nation	Status	Value of transaction in US\$ bil.	Category
Dec	Cimpor Cimentos de Portugal SGPS SA	Portugal	Cia Siderurgica Nacional	Brazil	Intended	5.54	Nonmetallic minerals manufacturing
Nov	Transurban Group	Australia	Investor Group	Canada	Intended	4.59	Construction
Apr	Centex Corp	United States	Pulte Homes Inc	United States	Completed	3.11	Home building
Dec	Daewoo Engineering & Construction Co Ltd	South Korea	Korea Development Bank	South Korea	Pending	2.47	Engineering services
Aug	Cegelec SA	France	Vinci SA	France	Pending	1.71	Engineering services
Jun	Cemex SAB de CV-Australian Assets	Australia	Holcim Ltd	Switzerland	Completed	1.63	Nonmetallic minerals manufacturing
Dec	Terex Corp-Mining Business	United States	Bucyrus International Inc	United States	Pending	1.30	Construction machinery and materials

Valuations remain attractive

Deal valuation by median deal value to sales

Measured by announced deals worth \$50 million or more



Into 2010, valuations for targets, represented by median deal value to sales multiples, remain attractive. However, most of the discounts experienced during the first three quarters of 2009 were relinquished during the fourth quarter. The lower valuations seen throughout most of 2009 reflected acquirers' reassessment of market opportunity and risk, as many targets' business models faced declining revenue and profit. The increase in valuations during the fourth quarter may suggest that demand is building and/or risk aversion is moderating as the global economic recovery ensues. Into 2010, the M&A environment appears to be gaining momentum, and we believe valuations may continue to move higher, thanks in part to stronger equity markets, more readily available credit, and an overall improvement in global economic fundamentals.

Construction targets lead deal activity

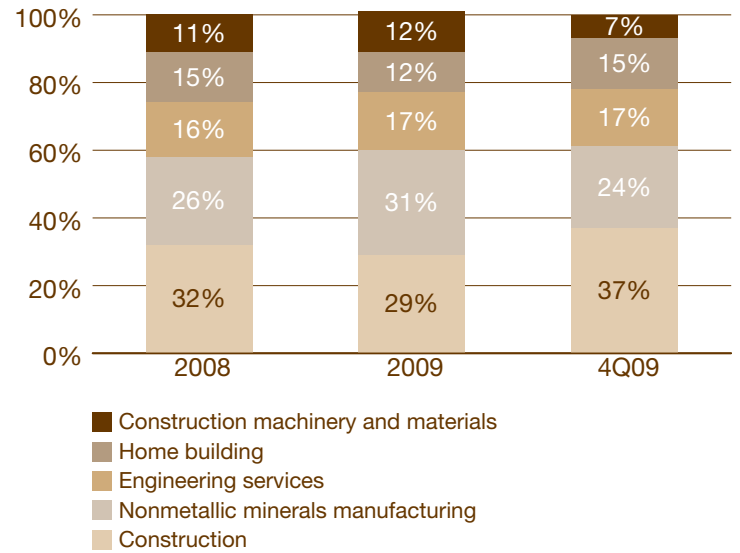
PwC segments the E&C sector into five categories by comparing standard industrial classification (SIC) codes with our internal classification system. Based on this process, we group deals (measured by number) into five product and service segments:

- Engineering services
- Nonmetallic minerals manufacturing
- Construction machinery and materials
- Home building
- Construction

Based on this methodology, firms that participate in construction and nonmetallic minerals manufacturing continued to be the primary acquisition targets during the fourth quarter. Of the 41 transactions announced during the period, 25 (61 percent) were attributable to transactions involving these categories.

Deals by engineering & construction category

Measured by number of announced deals worth \$50 million or more

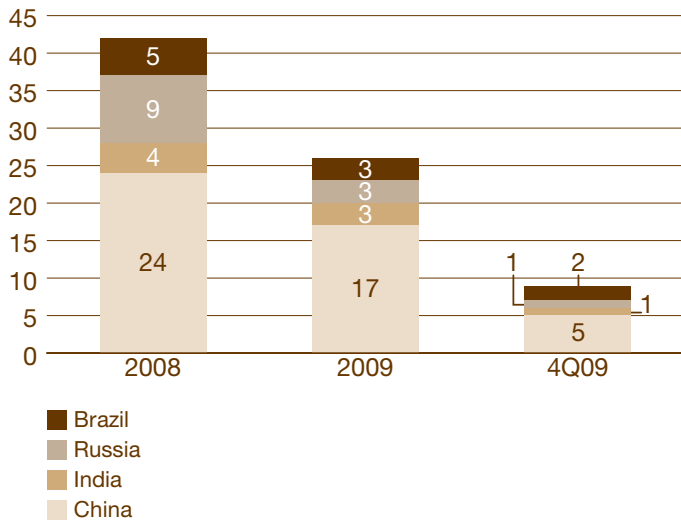


Note: Columns may not sum to 100 percent due to rounding

China remains out in front of BRIC transactions

Distribution of BRIC deals by acquirer nation

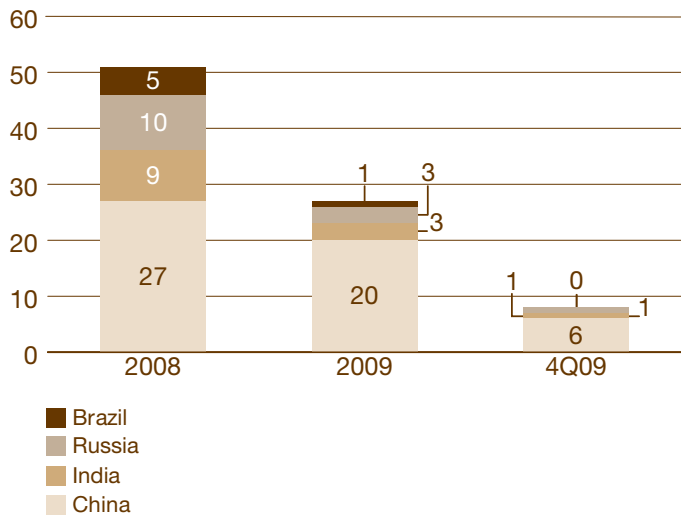
Measured by number of announced deals worth \$50 million or more



Considering acquirer and target nations, China continues to be the emerging economy with the highest level of deal activity. During the fourth quarter, of the nine transactions announced by BRIC acquirers, five were from China. Of the eight transactions announced for BRIC targets, six were for Chinese targets (five local market transactions). The lone cross-border transaction for a Chinese target was US-based II-VI Inc.'s \$83.4 million acquisition of Photop Technologies Inc. (Photop). Photop is a vertically integrated manufacturer of engineered materials, optical components, and optical modules for use in fiber optic communication networks and other diverse consumer and commercial applications. II-VI, the worldwide leader in crystal growth technology, plans to leverage Photop's experienced management team, expertise in crystal materials and optics, and its technologies and product portfolio to drive longer-term growth and build a stronger presence in the growing Chinese market for engineered materials and components. In return, the transaction is expected to provide Photop access to greater financial resources to further secure its research and product development, sales, marketing, and manufacturing operations.

Distribution of BRIC deals by target nation

Measured by number of announced deals worth \$50 million or more



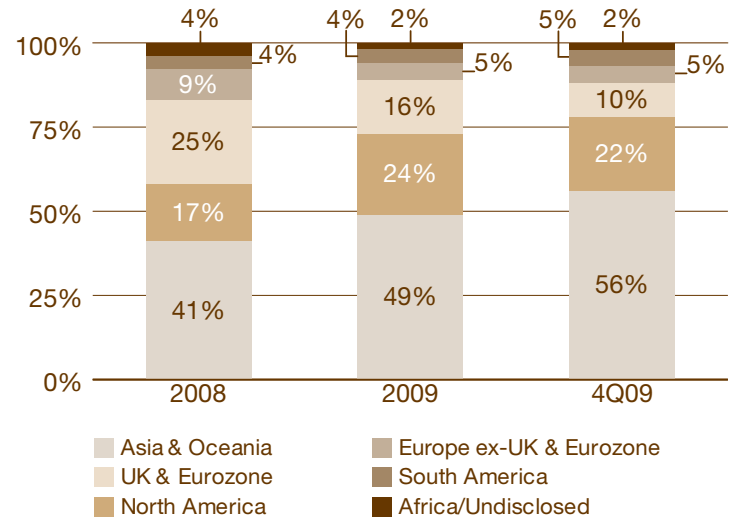
Regional analysis

Interest in North American and Asia and Oceania targets continues to drive deal activity

In keeping with the historical trend, deal activity in the fourth quarter primarily involved targets and acquirers in Asia and Oceania, North America, and the UK and Eurozone. This may be partly attributable to regulatory environments in these regions that generally support both domestic consolidation and foreign investment. Also, regionalization efforts may be stronger considerations for acquirers in these regions as they aim to build density in new and/or existing markets and diversify product lines, among other things.

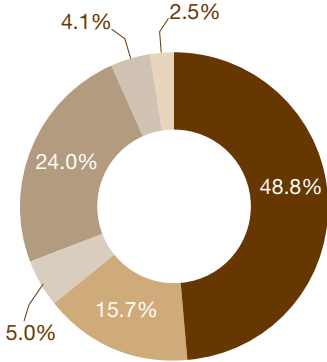
Regional distribution of deals by target region

Measured by number of announced deals worth \$50 million or more



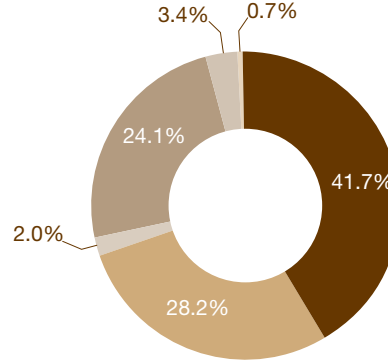
Regional distribution of deals by target region

Measured by number of announced deals worth \$50 million or more (2009)



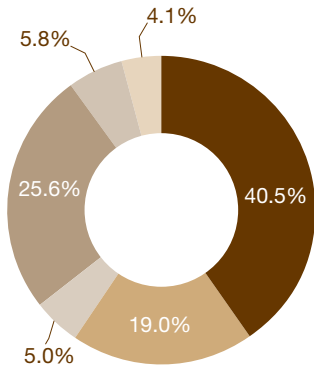
Regional distribution of deals by target region

Measured by value of announced deals worth \$50 million or more (2009)



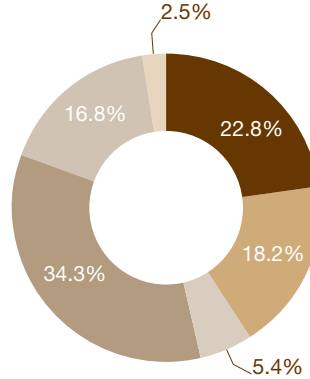
Regional distribution of deals by acquirer region

Measured by number of announced deals worth \$50 million or more (2009)



Regional distribution of deals by acquirer region

Measured by value of announced deals worth \$50 million or more (2009)



Asia & Oceania
 North America
 South America
 UK & Eurozone
 Europe ex-UK & Eurozone
 Africa/Undisclosed

2010 first-quarter outlook

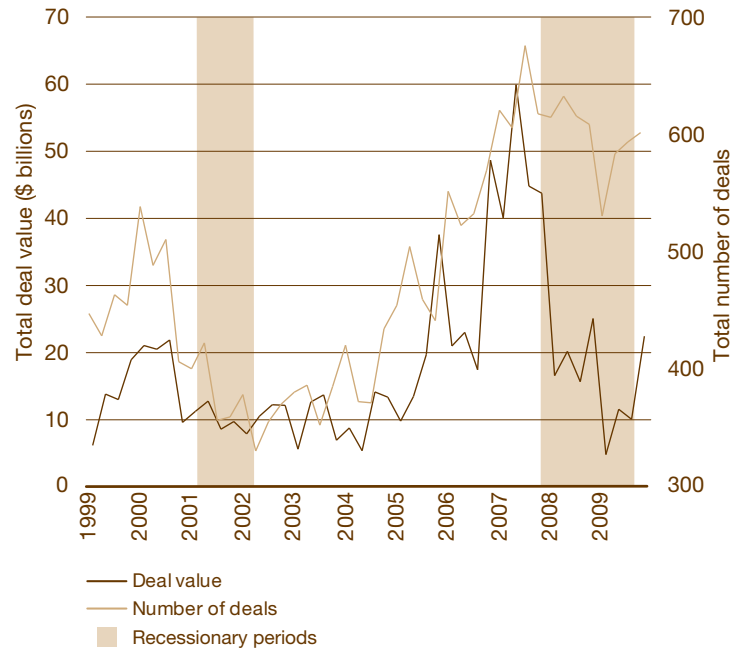
Although global economic conditions are improving, many companies may continue to view M&A activity as a longer-term strategic initiative, focusing in the near term on shoring up balance sheets, cutting costs, and improving markets as they realign operating strategies. Nevertheless, companies with stronger operating models and cash positions will continue to execute deals. Furthermore, as equity markets continue to gain momentum, companies benefiting from stronger relative share prices likely will be in a better position to use stock as a financing mechanism for structuring deals.

Heading into the first quarter of 2010, we believe that:

- Deal activity should be stronger on a year-over-year basis because of a weak first-quarter 2009 comparison. Although sequential comparisons are more challenging, the improving global economy may fuel an increase in sequential trends.
- Financial investors' interest in overall deal activity will remain firm, but strategic interests will continue to drive the bulk of larger deal activity. In addition, distressed transactions and minority- and incremental-stake investments should continue to be important drivers of deal activity, particularly as they relate to financial investors.
- Although cross-border activity declined during the fourth quarter relative to prior periods, it should continue to be an important driver of deal activity as acquirers aim to take advantage of weakness in foreign markets.

Historical engineering and construction deal activity and the US business cycle

Measured by number and value of E&C deals (1999-2009)



Moving your company and the economy forward

As the world rapidly changes and becomes more complex, engineering and construction companies are seizing opportunities to reexamine their businesses to look for ways to squeeze more performance from technology and processes and to advance their strategic goals. These are companies actively engaged in change—adjusting to a global marketplace, new reporting standards, an ever-changing regulatory environment, expansion, contraction, and foreign operations.

A year ago, the global recession was deepening, and credit markets were almost frozen. Struggling companies looked to carve out and sell portions of their operations in an effort to generate needed capital or exit noncore business units. The environment presented extraordinary opportunities for companies with strong balance sheets and available capital to expand market share and increase profitability.

To improve balance sheets, construction contractors frequently engage in joint ventures with other parties on construction projects to share risks; combine the skills, talents and resources of the participants; or to obtain financing or bonding. In these types of arrangements, it is advisable to review a joint venture between E&C businesses to determine the effect of the new structure from both a financial

and tax perspective. Construction contractors must also be aware of the specific accounting and tax rulings that impact joint ventures.

Change is the answer to a new beginning, but where to begin?

Capturing the benefits of change requires insight into its potential effects on the enterprise as a whole. This means strategy, structure, people, processes, and technology. To move from strategy to execution, companies need to translate strategy into practical results while avoiding major disruptions to ongoing operations.

PwC Advisory professionals understand the fundamentals of creating, capturing, and measuring value. We know how to address people, processes, strategy, structure, and technology in an integrated fashion, and we can help you execute your plans—both across functions and across the organization.

From enterprisewide process improvement to sustainable cost reduction; from transactions that capture and create value to rapid crisis response; from strategic IT solutions that align with business needs to cost-effective talent management and sourcing... the mission of our Advisory practice is to help business leaders anticipate, create, and manage change.

How PwC can help with M&A

Whether the business objective is to diversify products or services, enter new markets, or achieve revenue or cost synergies, many difficult choices are associated with making the right M&A decision.

The strategy professionals within PwC's Transaction Services practice help clients to align and clarify senior management teams' strategic priorities for organic and inorganic growth. Advisory services are offered in commercial due diligence, M&A strategy, and growth strategy and innovation.

Once management's priorities are determined, PwC can assist by identifying potentially attractive industry and product sectors, and working with top management to refine screening criteria to produce a shortlist of best-fit acquisition targets that match priorities.

Clients gain the information they need to strengthen their deal pipelines, become more credible and proactive bidders, and potentially avoid bad deals. Clients also benefit from the convenience of a single adviser and point of contact who has commercial and financial proficiency and expertise ranging from strategy to deal due diligence to post-deal integration.

Specialty case study: Managing a large capital project

Client: A global engineering and construction company

Client Issue The client provides conceptual design, detail engineering, material procurement, fabrication, project management, construction, commissioning, startup, and training on liquefied natural gas (LNG) projects around the globe. These \$1 billion-plus LNG import terminal projects are typically built in remote areas where LNG is stored in huge storage tanks, re-gasified, and distributed to large geographical areas.

As part of the process of undertaking large capital construction projects, the client's internal audit and risk group visits project sites and thoroughly reviews the compliance with policies and procedures, associated costs, challenges, process flows, and potential risks for each project phase. However, the internal audit and risk team did not have specialists with the capital project management skills needed for these large-scale infrastructure projects. Because a standard internal audit may not capture all the risks associated with such projects, the company reached out to PwC to contribute capital project management skills to the audit team's review.

Approach For the past four years, PwC has worked with the firm's internal audit and risk group performing a comprehensive assessment of project control tools, procedure implementation, and change controls, and identifying risk and improvement areas. In this role, PwC has provided:

- Analysis of tools and procedures for monitoring contract requirements
- Review of existing procedures to manage project risk, highlight strengths, and identify potential gaps in the systems and controls
- Observations and recommendations on project management tools and procedures
- Recommendations for changes or improvements to processes and/or controls
- Detailed schedule assessments to identify risks and observations on schedule control
- Evaluations of scheduling tools
- Review of progress versus actual performance against budget based on time and cost
- Review of final cost forecast and likely profit or loss position
- Review of client's management process
- Validation of time and cost projections

Impact The review and analysis work performed by PwC's Capital Project Services group provides comfort to the project management and leadership teams and the client's board by anticipating key issues and impacts, and by providing recommendations for performance improvement. PwC also supports the success of the client's projects by providing an independent validation of project time and expense forecasts.

Further, PwC training is enabling the client's internal audit and risk group to review projects from a capital audit perspective, aiding its members in identifying risks and making recommendations.

PricewaterhouseCoopers' engineering and construction industry experience

Deep engineering and construction experience

More E&C companies listed on the Fortune 500 use the audit services of PwC than any other accounting firm. Our Engineering and Construction industry practice comprises a global network of professionals who serve more than 20,000 E&C companies around the world. We specialize in providing Assurance, Tax, and Advisory services to contractors, house builders, building products companies, professional and support services companies, and governments. Central to the successful delivery of our services is an in-depth understanding of the industry issues affecting E&C companies and the complexities involved in solving related business challenges. Our highly skilled team encourages dialogue through active participation in E&C conferences and associations such as the Construction Financial Management Association, as well as through industry-focused publications and Web forums. To address our clients' needs wherever they arise, our professionals are concentrated in areas where the E&C industry operates today and in the emerging markets where it will operate in the future.

Quality deal professionals

PwC's Transaction Services practice, with more than 3,800 dedicated deal professionals worldwide, has the right industry and functional experience to advise clients on factors that could affect a transaction, including market, financial accounting, tax, human resources, operating, IT, and supply chain considerations. Teamed with our Engineering and Construction practice, our transaction professionals can bring a unique perspective to a deal, addressing it from a technical aspect as well as from an industry point of view.

Local coverage, global connection

In addition to having more than 4,800 professionals who serve the E&C industry, our team is a part of an expansive Industrial Products group that consists of 31,000 professionals, including approximately 15,800 providing Assurance services, 9,000 providing Tax services, and 6,200 providing Advisory services. This expands our global footprint and enables us to concentrate efforts in bringing clients a greater depth of talent, resources, and know-how in the most effective and timely way.



Contacts

PricewaterhouseCoopers Global Engineering and Construction practice

PwC's Engineering and Construction practice provides industry-focused Assurance, Tax, and Advisory services. Through our global network, we can draw upon the technical and industry experience of specialists in every country in which your company operates.

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PricewaterhouseCoopers Global Transaction Services practice

PwC's Transaction Services practice offers a full range of tax, financial, business assurance, and advisory capabilities covering acquisitions, disposals, private equity, strategic M&A advice, advice on listed company transactions, financing, and public-private partnerships.

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PricewaterhouseCoopers Global Capital Project and Infrastructure practice

PwC's Capital Project & Infrastructure (CP&I) practice focuses on transactions and the building of assets that span both the public and private spaces, with experience in the planning, analysis, execution and governance and reporting of large capital programs, public-private partnership experience on both the public and commercial side, regulatory expertise, fund structuring and deal expertise in synergistic areas such as tax, sustainability, fraud and corruption, utilities, energy, healthcare and government.

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Methodology

Engineering growth is an analysis of deals in the global engineering and construction sector. Deal information was gathered from Thomson Financial and includes deals for which targets have primary SIC codes that fall into one of the following SIC industry groups: single-family housing construction; residential construction; operative builders; industrial buildings and warehouses; nonresidential building construction; highway and street construction; bridge, tunnel, and elevated highway construction; water, sewer, pipeline, and utility line construction; heavy construction; plumbing, heating, and air conditioning; electrical work; carpentry work; roofing, siding, and sheet metal work; concrete work; water well drilling; structural steel erection; excavation work; installation or erection of building equipment; special trade contractors; asphalt paving mixtures and blocks; asphalt felts and coatings; flat glass; glass containers; pressed and blown glass and glassware; glass products, made of purchased glass; cement, hydraulic; brick and structural clay tile; ceramic wall and floor tile; clay refractories; vitreous plumbing fixtures and bathroom accessories; fine earthenware (whiteware) kitchen articles; pottery products; concrete block and brick; concrete products, except block and brick; ready-mixed concrete; gypsum products; cut stone and stone products; abrasive products; minerals and earths, ground or otherwise treated; mineral wool; nonclay refractories; nonmetallic mineral products; construction machinery and equipment; mining machinery and equipment, except oil and gas; oil and gas field machinery and equipment; elevators and moving stairways; conveyors and conveying equipment; hoists, cranes, monorail systems; industrial trucks, tractors, trailers, and stackers; lumber, plywood, millwork, and wood panels; brick, stone, and related construction materials; roofing,

siding, and insulation materials; construction materials; lumber and other building materials dealers; engineering services; architectural services; surveying services; air and water resource and solid waste management.

This analysis includes all individual mergers and acquisitions for disclosed or undisclosed values, leveraged buyouts, privatizations, minority-stake purchases and acquisitions of remaining interest announced between January 1, 2006, and December 31, 2009, with a deal status of completed, intended, partially completed, pending, pending regulatory approval, unconditional (i.e., initial conditions set forth by the buyer have been met but deal has not been completed), or withdrawn.

Regional categories used in this report approximate United Nations (UN) Regional Groups, as determined by the UN Statistics Division, with the exception of the North America region (includes Northern America and Latin and the Caribbean UN groups), the Asia and Oceania region (includes Asia and Oceania UN groups) and Europe (divided into UK and Eurozone and Europe ex-UK and Eurozone regions). The Eurozone includes Austria, Belgium, Cyprus, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovenia, and Spain. Oceania includes Australia, New Zealand, Melanesia, Micronesia, and Polynesia. Overseas territories were included in the region of the parent country and China, when referenced separately, includes Hong Kong. The term “deals,” when referenced herein, refers to deals with a disclosed value of at least \$50 million unless otherwise noted.

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