

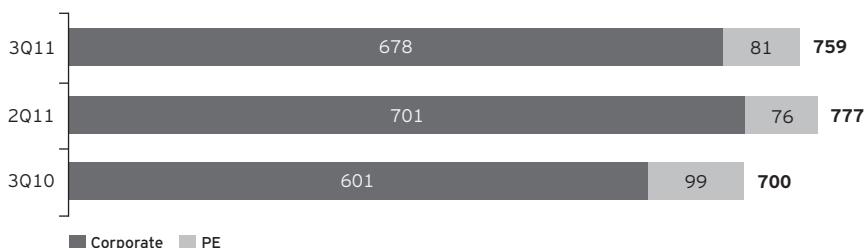
Global technology M&A update

July-September 2011

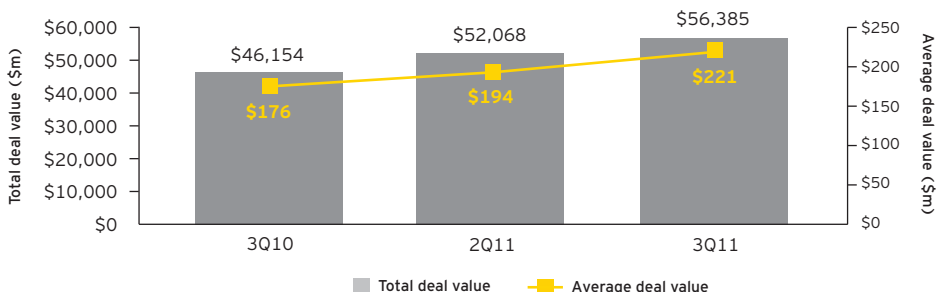
Highlights

- ▶ Aggregate value of all disclosed value deals (corporate and PE) increased 8% to \$56.4 billion in 3Q11 and 22% year-over-year (YOY)
- ▶ Private equity (PE) aggregate value increased 82% sequentially to \$14.6 billion in 3Q11 and increased 86% YOY
- ▶ Aggregate value of the top 11 deals was \$40.1 billion, or 71% of all disclosed value for 3Q11
- ▶ Deal volume fell sequentially by 2% for the second consecutive quarter, to 759 deals in 3Q11
- ▶ Cross-border (CB) deal growth paused: CB deals declined 11% each in volume and value during 3Q11, compared with 2Q11

Total number of all announced deals

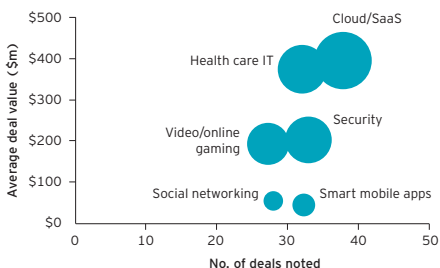


Total and average deal values (\$m), for deals with disclosed values



Source: Ernst & Young analysis of FactSet Mergerstat data, accessed 6 October 2011.

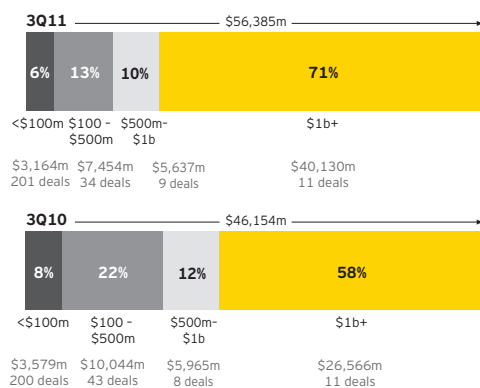
A directional view of select 3Q11 deal-driving trends



Health care IT average deal value soared in 3Q11 on the strength of two large deals, including a \$2.2 billion deal to take Emdeon private (Figure 1, page 4). Otherwise, deal numbers among these deal-driving trends have been stable quarter-to-quarter in 2011, while average values have risen slightly.

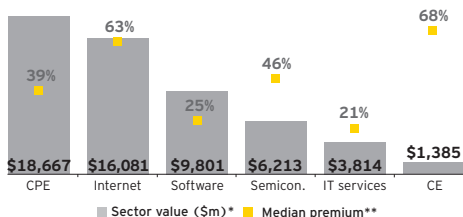
Note: average deal value is based on the value of disclosed value deals, while number of deals includes both disclosed and non-disclosed value of deals noted for the given trend.

Aggregate value of announced deals by deal size, 3Q11 vs. 3Q10



Big-ticket deals (\$1 billion or more) continued to dominate in 2011, growing 51% YOY to a commanding 71% of 3Q11 aggregate value (they were 61% in 2Q11 and 44% in 1Q11). Every other deal-size category shrunk over the first nine months of 2011 except for deals between \$500 million and \$1 billion, which fluctuated between 5% and 10% of quarterly value.

Deals by sector based on value and median premium, 3Q11



Based on available data, internet and CE companies received the highest premiums in 3Q11, although the internet premium is for a single deal only.

CE = Communications equipment
CPE = Computers, peripherals and electronics

* Based on sector of buyer, except deals with PE and non-technology buyers, which are aligned by sector of the seller.

** For deals greater than \$100m involving the acquisition of a public target; internet and IT services premia are based on one deal each.

Source: Ernst & Young analysis of FactSet Mergerstat data, accessed 6 October 2011.

Third quarter picture unfolds

Deal drivers

- ▶ Cloud computing, smart mobility, information security and social networking continued to dominate deal-driving trends. In fact, as time passes we're seeing technologies related to these trends more integrated with each other – and with just about everything else.
- ▶ Health care IT deal volume continued strongly, including a big-ticket \$2.2 billion deal (Figure 1, page 4).
- ▶ Business intelligence/analytics deals increased in the quarter, expanding across a range of applications and industry uses.
- ▶ Internet and mobile video technologies, online and mobile games, solar energy technology and the integration of social networking functions into a range of other technologies also drove deals in the quarter.

Deal activity

- ▶ At 759 deals, 3Q11 volume was 8% higher YOY but 2% down from 2Q11 (777 deals) and 4% down from 1Q11 (794 deals).
- ▶ Although it was up 13% YOY, corporate deal volume has been declining since the beginning of the year, to 678 in 3Q11 from 701 in 2Q11 and 721 in 1Q11.
- ▶ Although they were down 18% YOY, PE deals have been climbing in 2011, to 81 in 3Q11 from 76 in 2Q11 and 73 in 1Q11.
- ▶ Our observed long-term directional correlation between deal volume and the NASDAQ Composite Index continued: the index fell 13% in 3Q11.

Deal value

- ▶ Aggregate announced deal value was \$56.4 billion in 3Q11 – an increase of 22% YOY, 8% sequentially and the highest total for any calendar quarter since 2007.
- ▶ At \$221 million, the average value of deals increased 26% YOY (from \$176 million in 3Q10) and 14% sequentially (from \$194 million in 2Q11).
- ▶ Two deals topped \$10 billion in 3Q11 for the first time since the first quarter of 2000, which had three \$10+ billion deals. In addition, average value was the highest since that same 2000 quarter (just before the dot-com bubble burst).
- ▶ PE deal-makers increased values the most in 3Q11: aggregate value of PE deals increased 86% YOY and 82% sequentially to \$14.6 billion in 3Q11, the highest quarterly total since the first half of 2007. Average value of PE deals increased 153% YOY and 74% sequentially to \$584 million in 3Q11.
- ▶ The aggregate value of corporate deals rose 9% YOY but fell 5% sequentially to \$41.8 billion; the average value of corporate deals climbed 8% YOY and 1% sequentially to \$182 million.

Deals getting done

- ▶ By sector, deal volume (combined corporate and PE) grew YOY in every sector except internet (-9%) and software (-5%).
- ▶ Sequentially, all sectors increased in deal volume except internet, which was flat, and software, which declined 22% following a 2Q11 spike (Figure 5, page 14).

Cross-border deals

- ▶ At 277 deals, CB deal volume was 36% of all 3Q11 deals, down from 40% in 2Q11 but still ahead of 34% in 1Q11 and for all of 2010.
- ▶ The aggregate value of CB deals was \$21.3 billion, or 38% of aggregate value in the quarter (CB and IB), compared with 46% in 2Q11.
- ▶ The average value of CB deals declined sequentially (-2%) and rose 6% YOY. This was a lower performance than all deals (CB and IB) (see second "Deal value" bullet above), following two quarters in which CB average value grew faster than that of all deals.



Third quarter technology M&A bucks the trend

Even as M&A value declined in other industries, the aggregate value of global technology M&A increased 8% in the third quarter of 2011. It was the second consecutive quarter dominated by big-ticket deals in which established companies pursued key strategic growth trends, but with a twist – this quarter, PE firms contributed more than half of the deals valued above \$1 billion (Figure 1, page 4). Deals involving business intelligence/analytics came on strong in 3Q11, and hundreds more transactions were driven by other important trends we've watched develop for several quarters: cloud computing, smart mobility, security, social networking, internet and mobile video, online and mobile games and health care IT. This time, however, more deals seemed to combine two or more of these trends than we've seen in the past.

“Businesses worldwide are moving rapidly toward mobile-social infrastructures in the cloud. Deal-making to help meet those businesses' needs is what drove technology M&A up in the third quarter, even though deal-making in other industries declined.”

Joe Steger

Global Technology
Transaction Advisory Services Leader

Deal values tick up

After soaring in the second quarter to levels not seen since 2007 (before the beginning of the global downturn), aggregate disclosed values of global technology M&A transactions increased another 8% sequentially and 22% YOY to \$56.4 billion in 3Q11 (Figure 3, page 7). The quarter's big-ticket deals caused another 14% sequential (and 26% YOY) increase in average value per deal to \$221 million, the highest level in 11 years. The last time average deal value was higher was in the first quarter of 2000, the same quarter in which the NASDAQ Composite Index peaked at an intraday high of 5132.52 just before the dot-com bubble burst. In that quarter, average value per global technology M&A deal rocketed to \$380.7 million, but subsequently has not risen above \$190 million until hitting \$194 million in 2Q11.

The increase in technology M&A values is even more impressive against the backdrop of published reports showing an 18% sequential and 21% YOY decline in the value of global transactions for all industries.¹ Market volatility amid global economic uncertainty, which makes it difficult to establish stable valuations, was blamed for the decline. The insistent trends driving global technology M&A, however, have thus far persisted in driving aggregate and per-deal values higher.

Deal volume ticks down – again

However, deal volume fell sequentially by 2% for the second consecutive quarter, to 759 deals in 3Q11. It was 794 deals in the first quarter and 777 in the second. This year's deal volume stagnation comes after a string of eight consecutive quarters without a volume decline from 1Q09 to 1Q11. We have long noted a correlation between deal volume and the NASDAQ index, and it continues to hold true: the index and deal volume both rose in 1Q11, and both declined in the two quarters since.

Still, published reports indicate that 3Q11 deal volume for all industries declined far more – by about 9%, compared with the 2% technology decline.²

PE deal values soar

Growth in the aggregate value of PE transactions is what drove the overall sequential increase in value. Aggregate PE deal value increased 82% sequentially and 86% YOY to \$14.6 billion in 3Q11 – a level that is equal to or higher than before the downturn. And at \$584 million per deal (+74% sequentially and 153% YOY), the average value of disclosed-value PE deals is the highest we've seen. Of note, the big-ticket PE deals occurred across a broad spectrum of technologies targeting different industries, including health care, financial services and education.

Figure 1: Global top 11 deals, July-September 2011 (corporate and PE) – we expanded the top 10 deals to 11 in this report in order to present all 11 deals over \$1 billion

Buyer name	Disclosed value (\$m)	Announced	Status	Deal type	Multiple of TTM EV/Revenue	Multiple of TTM EV/EBITDA	Premium offered
Google Inc. to acquire Motorola Mobility Holdings, Inc.	\$11,878*	15 August	Pending	Corporate	0.7x	27.5x	63%
Hewlett-Packard Company acquired Autonomy Corporation plc	\$10,222	18 August	Completed**	Corporate	6.0x	13.7x	62%
Broadcom Corporation to acquire NetLogic Microsystems, Inc.	\$3,450	12 September	Pending	Corporate	7.7x	32.0x	67%
Innovation Network Corporation of Japan to acquire mobile display units of Hitachi Ltd, Sony Corporation and Toshiba Corporation	\$2,600	31 August	Pending	PE	N/A	N/A	N/A
KKR & Co. LP, Silver Lake Group LLC and Technology Crossover Ventures LP to acquire The Go Daddy Group, Inc.	\$2,250	2 July	Pending	PE	N/A	N/A	N/A
Blackstone Group LP to acquire Emdeon Inc.	\$2,201	4 August	Pending	PE	2.7x	11.2x	23%
CVC Capital Partners to acquire ConverqEx Group	\$1,900	20 July	Pending	PE	N/A	N/A	N/A
Advent International Corporation to acquire majority stake in the business and assets of the smart cards division of Oberthur Technologies SA	\$1,628	4 August	Pending	PE	N/A	N/A	N/A
Providence Equity Partners LLC acquired Blackboard Inc.	\$1,576	1 July	Completed**	PE	3.6x	19.2x	2%
Electronic Arts Inc. acquired PopCap Games, Inc.	\$1,300	12 July	Completed***	Corporate	N/A	N/A	N/A
NCR Corporation acquired Radiant Systems, Inc.	\$1,126	11 July	Completed***	Corporate	2.2x	15.2x	30%

Smart mobility, “big data,” secure electronic payments, health care IT and multiplatform online games were among the 3Q11 technology trends that produced the quarter’s top 10 deals – or in this case, the top 11.

Smart mobility was the key driver behind the Google-Motorola Mobility and Broadcom-NetLogic Microsystems deals. In the HP-Autonomy deal, HP is obtaining technology that distills “meaning” from vast quantities of unstructured data.³ The Advent International-Oberthur Technologies and NCR-Radiant deals both involve payment technologies, the former in the form of smart cards (also used to manage identity) and the latter in point-of-sale retail systems. The Blackstone-Emdeon deal was the largest of many health care IT-related deals in 3Q11, and the EA-PopCap Games deal was the largest of many online/mobile games deals – and the first one we’ve ever seen top \$1 billion.

Of note, this was only the second time since 2008 that there were 11 deals with disclosed values above \$1 billion – but this time the aggregate value was far higher. At \$40.1 billion, the aggregate value of the top 11 deals represented 71% of all 3Q11 aggregate value. That’s the highest concentration we’ve seen since we began producing these reports in 2008. The last time that there were 11 deals above \$1 billion was in 3Q10. The aggregate value of those deals was \$26.6 billion, which was 58% of all disclosed value that quarter.

Figure 1 definitions:

TTM = trailing 12 months.

Multiple of TTM EV/Revenue is the transaction value multiple representing total transaction value over trailing 12 months of target revenue.

Multiple of TTM EV/EBITDA is the transaction value multiple representing total transaction value over trailing 12 months of target EBITDA (earnings before interest, taxes, depreciation and amortization).

Premium offered represents the percentage difference between the purchase price and the share price value five business days prior to announcement of the deal.

*\$12.5 billion per Google’s press release (“Google to Acquire Motorola Mobility,” ENP Newswire, 15 August 2011, via Dow Jones Factiva, © 2011 Electronic News Publishing.)

FactSet Mergerstat recognized \$11,878 billion of disclosed value for this deal. FactSet Mergerstat database methodology automatically subtracts cash acquired, net of debt, from enterprise value.

**Completed October 2011

***Completed August 2011

Source: Ernst & Young analysis of FactSet Mergerstat data, accessed 6 October 2011; “Multiple” data accessed via Capital IQ and “Premium” data accessed via FactSet Mergerstat on 11 October 2011, respectively.

Corporate transactions decline

The aggregate value of corporate transactions, meanwhile, declined 5% sequentially to \$41.8 billion in 3Q11 from \$44 billion in 2Q11. Average value for corporate deals increased just 1%, to \$182 million in 3Q11 from \$180 million in the prior quarter. Year over year, that corporate aggregate value represents a 9% increase; average value increased 8%.

Cross-border deal volume and value grow slower than in-border

Cross-border deals have been increasing as a percentage of the volume and value of all deals (CB and IB) since 2009, with only occasional pauses in the upward trend. This quarter was one of those pauses. After spiking to 40% of all deals (311 deals) and 46% of aggregate value (\$24 billion) in 2Q11, CB deals declined 11% each in volume and value during 3Q11. CB deal volume of 277 deals was 36% of all deals for the quarter, and CB aggregate value of \$21.3 billion was 38% of all disclosed value.

The big-ticket deals of 3Q11

For the second consecutive quarter, the big story in global technology M&A is big-ticket deals – deals above \$1 billion. In fact, two deals topped \$10 billion in 3Q11 for the first time since there were three such deals in 1Q00. Aggregate value of the top 11 deals was \$40.1 billion or 71% of all disclosed value for the quarter. In these and many other 3Q11 deals, established companies and PE firms placed key bets on cloud computing, smart mobility, business intelligence/analytics, online and mobile games, internet and mobile video, health care IT, and the education or financial services industries.

Smart mobility – and patents – drive biggest deal in three years

The largest 3Q11 deal by dollar value was Google's pending purchase of Motorola Mobility for \$11.9 billion (our figure differs from widely published reports because our methodology subtracts cash acquired, net of debt, in calculating the enterprise value of a transaction). The deal has the highest disclosed value of any technology transaction since HP purchased Electronic Data Systems Corporation in May 2008 for \$12.6 billion. Assuming the deal closes, Google will become a supplier of Android smartphones as well as television set-top boxes.

However, the intellectual property (IP) that comes with Motorola also motivated the deal. In his blog post announcing the acquisition, Google CEO Larry Page wrote that the deal "will increase competition by strengthening Google's patent portfolio, which will enable us to better protect Android from anti-competitive threats."⁴ Of note, the announcement came six weeks after a consortium of competitors outbid Google to acquire Nortel Networks Inc.'s portfolio of 6,000 patents (many of which pertain to smart mobile technologies) for \$4.5 billion.⁵ The companies involved in the winning consortium were Apple, Inc., EMC Corporation, Telefon LM Ericsson, Microsoft Corporation, Research In Motion Ltd. and Sony Corporation.

The Motorola deal may also strengthen GoogleTV, the company's technology for cable set-top boxes and TVs that lets people search for web video as well as TV programs. Motorola Mobility is a provider of set-top boxes to cable companies, and Google considered that aspect of the deal as well.⁶ Thus, the deal is a strategic triple for Google: it increases the company's exposure to Android success, provides additional IP protection for other Android licensees and furthers the company's internet video plans. At 63%, the deal also has the second-highest premium of the 11 3Q11 deals above \$1 billion (Figure 1, page 4).

Smart mobile semiconductors – with a security twist

The transaction with the highest premium (67%) among the top 11 deals was Broadcom's pending deal to purchase NetLogic Microsystems for \$3.5 billion. NetLogic makes a variety of multi-core processors designed to accelerate data transmission in fixed and mobile networks. These include 3G/4G mobile wireless infrastructure, cloud and enterprise data center and metro Ethernet networks.⁷ The deal is Broadcom's second this year to strengthen its core mobile network offerings. In 1Q11, the company announced the purchase for \$313 million of Provigent, Inc., a provider of high-performance mixed-signal semiconductors used in microwave backhaul systems. These systems provide part of the backbone wireless infrastructure for mobile communications.





The Broadcom-NetLogic deal is also an example of multiple trends intersecting, because it is the second Broadcom deal this year to touch on security. NetLogic's processors accelerate network traffic by looking into data packets in transit and making intelligent routing decisions based on data packet contents. As part of that process, they can also detect security problems.⁸ In 2Q11 Broadcom acquired SC Square Ltd., a provider of on-chip security solutions, for \$42 million.⁹

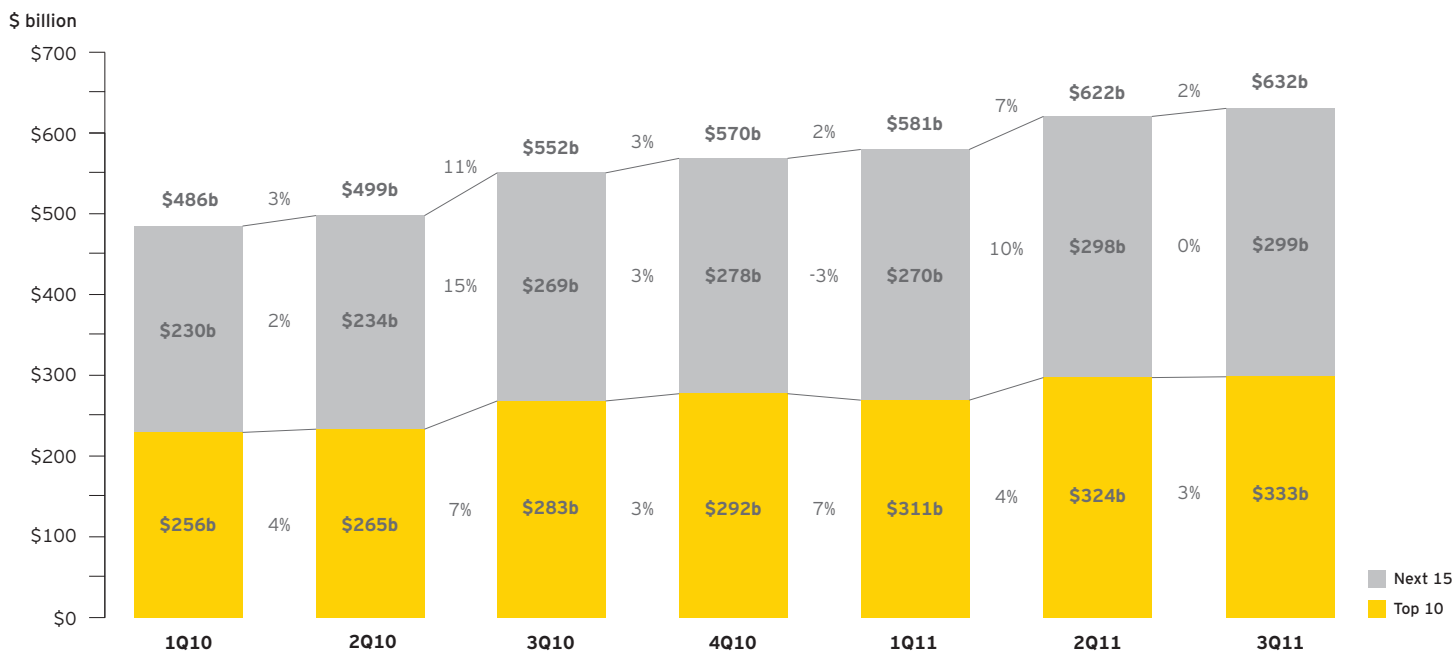
“Big data” leads to big deal

Business systems, mobile applications, social networking platforms and smart metering systems are generating an ever-increasing mass of data that is getting harder to analyze as it grows in size. Companies are struggling with what has come to be known as the “big data”

problem. Most of this data involves customer interactions, so technologies that help companies make sense of it all can provide important customer information and insights. This is the context for HP's \$10.2 billion acquisition of UK-based Autonomy – which would have been the highest dollar-value deal since May 2008, except that the Google-Motorola deal occurred in the same quarter.

Autonomy's technology, based on neural network and pattern recognition research done at Cambridge University in the early 1990s, was adopted early on by police forces and intelligence agencies to help them make sense of unstructured information to solve crimes.^{10,11,12} Today, Autonomy's technology, which excels at analyzing unstructured data, can help businesses extract meaning from the

Figure 2: Aggregate cash, short- and long-term investments of the top 25 technology companies, 1Q10 through 3Q11



The top 25 global technology companies* have increased their aggregate stockpile of cash, short- and long-term investments 14% YOY and 2% sequentially to \$632 billion in 3Q11. Big-ticket M&A deals earlier this year may be starting to slow the growth of this closely watched metric. It could even decline as the big-ticket deals of 2Q11 and 3Q11 begin to close over the coming months.

Because 7 of the top 10 are US-based companies, much of their cash is “held” overseas and cannot be repatriated without a high tax burden. This circumstance encourages them to put their cash to use in cross-border M&A, such as the \$8.5 billion Microsoft-Skype deal in 2Q11 or the 3Q11 HP-Autonomy deal (Figure 1, page 4).

The compound quarterly growth rate (CQGR) for the period shown is 3.9%, while the compound annual growth rate (CAGR) is 16.3%. Although the top 10 companies and the “next 15” grew their cash and investments at different rates in any given quarter, overall for the period their growth rates were virtually identical. The concentration of cash and investments among the top 10 was 52.7% in 3Q11, compared with 52.6% in 1Q10.

*Top 25 companies identified are based on average ranking of market value and sales as of 1 January 2011.

Note: numbers in above chart differ from published reports due to date Capital IQ database was accessed for this chart.

Source: Ernst & Young analysis of Capital IQ data, accessed 20 October 2011.

growing mass of structured and unstructured data that is inundating their existing systems. HP says the deal will strengthen its data analytics, cloud computing and workflow management capabilities.¹³

There were roughly two dozen other business intelligence/analytics deals in 3Q11, many of which intersect with other trends – most notably smart mobility and social networking. Several of these are discussed in the sidebar, “‘Big data’ also drives many smaller deals,” on page 11.

Six big-ticket PE deals

The next six deals by dollar value are PE transactions; they total \$12.2 billion, or about 84% of PE aggregate value for the quarter.

At \$2.6 billion, the highest-value deal of the six was a government-supported pooling of three Japanese companies’ small-panel LCD operations. Innovation Network Corporation of Japan, a PE firm backed by the Japanese government, formed Japan Display KK, a subsidiary that is planning to acquire Hitachi Displays Ltd., Sony Mobile Display Corporation and Toshiba Mobile Display Company Ltd. The PE firm will own 70% of Japan Display, while Hitachi Ltd., Sony Corporation and Toshiba Corporation will hold 10% each. Japan Display is expected to compete more effectively as a single entity because it can make more efficient use of capital and R&D expenditures, facilitating its investment in next-generation technologies such as thinner and higher-resolution organic light-emitting-diode displays.¹⁴

Figure 3: Global technology transactions scorecard, 3Q11

Deals announced	3Q10	3Q	4Q	1Q	2Q	3Q	3Q11	Sequential % change	YOY % change		
Corporate											
Number of deals announced	601						678	-3%	▼	13%	▲
Number of deals with disclosed values	228						230	-6%	▼	1%	▲
Total value of deals with disclosed values (\$m)	\$38,312						\$41,790	-5%	▼	9%	▲
Average value of deals with disclosed values (\$m)	\$168						\$182	1%	▲	8%	▲
PE											
Number of deals announced	99						81	7%	▲	-18%	▼
Number of deals with disclosed values	34						25	4%	▲	-26%	▼
Total value of deals with disclosed values (\$m)	\$7,842						\$14,595	82%	▲	86%	▲
Average value of deals with disclosed values (\$m)	\$231						\$584	74%	▲	153%	▲
Corporate and PE											
Number of deals announced	700						759	-2%	▼	8%	▲
Number of deals with disclosed values	262						255	-5%	▼	-3%	▼
Total value of deals with disclosed values (\$m)	\$46,154						\$56,385	8%	▲	22%	▲
Average value of deals with disclosed values (\$m)	\$176						\$221	14%	▲	26%	▲

Aggregate and average transaction values (corporate and PE) for 3Q11 added to the highs achieved in 2Q11, which was already at the highest level we’ve noted since 2007 (before the global recession). Aggregate value increased 8% sequentially and 22% YOY. Average value increased 14% sequentially and 26% YOY. Average value has not been this high since the first quarter of 2000, and aggregate value was back to pre-recession levels – despite the global macroeconomic uncertainty that dominated headlines this summer and the concurrent volatility of equities markets.

Yet total volume continued to dip sequentially, down 2% in each of the last two quarters. YOY, however, volume was up 8%. Aggregate and average PE deal values soared sequentially and YOY, while corporate aggregate value dropped 5% sequentially and average value increased just 1%. PE deal volume dropped 18% YOY, although it has a tough comparison: at 99 deals, 3Q10 was the highest PE volume level since before the global recession. Despite the YOY drop, PE deal volume has been creeping upward every quarter this year, while corporate deal volume has been creeping downward.

Source: Ernst & Young analysis of FactSet Mergerstat data, accessed 6 October 2011.



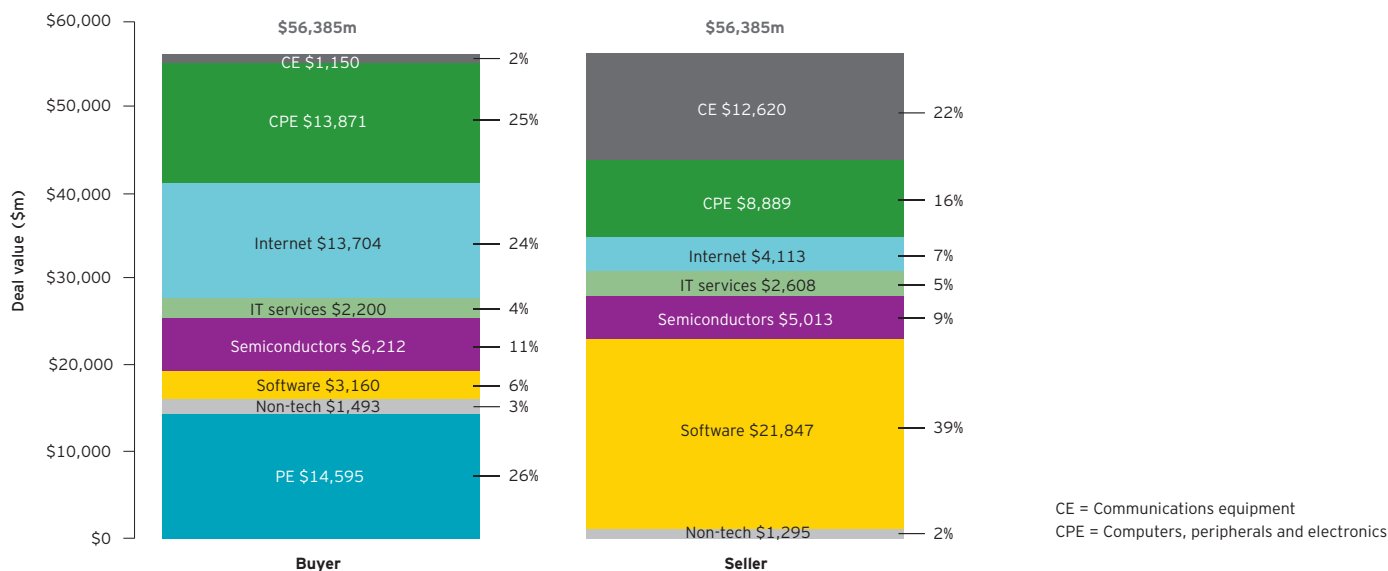
PE firms look for growth in multiple areas

The next five big-ticket PE deals are all unrelated, except that each targets an area anticipating growth: internet services, health care IT, financial services, education and electronic payments. KKR & Co., Silver Lake Group and Technology Crossover Ventures plan to acquire The Go Daddy Group Inc. for approximately \$2.3 billion. GoDaddy.com is a large domain name registrar that also sells e-commerce, security and other services. The PE firms expect to accelerate the company's growth, including overseas expansion, and help it find acquisition targets.¹⁵

In health care IT, Blackstone Group is taking Emdeon private in a \$2.2 billion deal. Emdeon is a financial clearinghouse that

processes claims for doctors, hospitals and insurers. Its growth plans involve electronic health record data and mobile applications – for example, Emdeon Vision Mobile gives health care providers mobile access to claim management data.^{16,17} In financial services, CVC Capital Partners plans a \$1.9 billion deal to buy ConvergEx, which previously had been planning an IPO. ConvergEx's technology structures stock and options trades and directs them to the exchanges offering the most favorable prices.¹⁸ In education, Providence Equity Partners (which has built a portfolio of for-profit education companies) completed plans to acquire Blackboard for \$1.6 billion. Blackboard's software supports development of online courses and access to online learning – including mobile access.¹⁹

Figure 4: Global technology transactions value flow by sector, 3Q11



The software sector was by far the biggest net seller in 3Q11, followed by the CE sector. For the CE sector, one big-ticket deal was 94% of the value sold – Google's pending \$11.9 billion acquisition of Motorola Mobility. That same deal was also 87% of the value acquired by the internet sector, making it a big net buyer. In the software sector, HP's \$10.2 billion purchase of Autonomy (completed) represented 47% of the total value sold. Three other top 11 deals – Blackstone-Emdeon (pending), CVC Capital Partners-ConvergEx (pending) and Providence Equity Partners-Blackboard (completed) – comprised another 26%. IT services was the only other net seller sector but by an unusually small amount – IT services has been a traditional target for the other sectors.

The net buyer sectors were internet, CPE (on the strength of the HP-Autonomy deal) and semiconductors. The semiconductor sector's net buying activity consisted of a variety of small software companies and non-technology companies (mostly solar or LED lighting-related).

Finally, non-technology buying fell again in 3Q11, down to about 3% of total value purchased, as compared with 7% in 2Q11 and roughly 15% for 1Q11 and all of 2010. However, PE firms climbed from purchasing 7% of all technology value sold in 1Q11 and 15% in 2Q11 to 26% in 3Q11. The \$14.6 billion purchased by PE firms in 3Q11 was an 82% increase over 2Q11 and a 669% jump from 1Q11.

Note: percentages may not total 100 due to rounding.

Source: Ernst & Young analysis of FactSet Mergerstat data, accessed 6 October 2011.

Two takes on payment technologies

Two very different payment technology deals occurred in 3Q11. The last of the big-ticket PE deals was US-based Advent International's planned \$1.6 billion purchase of the smart card business of Oberthur Technologies SA, France. That business makes payment cards for banks and SIM cards for mobile devices – and envisions growth via emerging products such as mobile phone payments solutions.²⁰ In the second deal, NCR Corporation, best known for its automated teller machines and point-of-sale systems, completed an acquisition of Radiant Systems Inc., which provides payment solutions to the hospitality, retail, and entertainment industries. The company expects synergies through cost consolidation.²¹

Big-ticket multiplatform online games deal

We see dozens of online games deals every quarter, but Electronic Arts' \$1.3 billion purchase of PopCap Games is the first one to rise above \$1 billion. Electronic Arts (EA) has been steadily transforming itself from a publisher of traditional console games into a multiplatform digital game provider through a series of M&A deals dating back to at least November 2009.²² That month, EA purchased Playfish Ltd. (\$255 million), a maker of social games that run on Facebook. In October 2010, EA bought Cillingo Ltd., the US publisher of the popular Angry Birds smartphone game, for an undisclosed amount. In May 2011 EA purchased Firemint Pty Ltd., another smartphone game developer, also for an undisclosed amount.

PopCap's games not only are available through multiple distribution mechanisms (e.g., retail disks, mobile devices, downloads, social networks) but they also utilize multiple business models.²³ In addition to for-fee game purchases, PopCap generates revenue via virtual goods sales and through competitive game play in which players compete for cash prizes.²⁴ Mobile distribution and virtual goods business models are among the key drivers of current game industry growth.

We noted nearly three dozen other games deals, most of which have either very small or no disclosed values – but nearly all of which involved games for mobile devices, social networks or both. One exception was Tencent Holdings Ltd's \$114.6 million deal for Kingsoft Corporation, which makes both antivirus software and online networked games. The deal between the two China-based companies appears to focus on the security software.²⁵

Security and the cloud

Although the dozens of cloud-related deals we found in 3Q11 range across a broad spectrum of applications, what appeared most prevalent was security. For example: VMware, Inc. purchased a company whose technology provides identity-based access management in the cloud. Earthlink, Inc. did two deals involving secure managed IT services. And Salesforce.com Inc. purchased a company whose technology encrypts and decrypts corporate data for cloud transmission. These deals were all completed; none had disclosed value.





Migration among the clouds

Other noteworthy cloud computing deals included Verizon Communications Inc.'s purchase (for a non-disclosed amount) of CloudSwitch Inc., whose technology makes it easier for corporations to migrate data into – or between – clouds. The technology is expected to increase cloud adoption by reducing fear over cloud lock-in.²⁶ Verizon plans to integrate CloudSwitch with Terremark Worldwide, Inc., the cloud services provider (CSP) it acquired in 1Q11 for \$1.3 billion.²⁷

Also noteworthy was a deal that brings CSP capabilities to Acer, Inc. Acer plans to purchase iGware, Inc., a CSP that will be renamed Acer Cloud Technology Co., for \$395 million. And the smallest of HTC Corporation's three pending 3Q11 deals was an \$18.5 million proposal to buy Dashwire, Inc., whose technology offers cloud-based synchronization of content across mobile devices, similar to the iCloud offering launched in October by Apple Inc. HTC also announced two other deals in 3Q11, one for high-end audio technology and another for graphics visualization technology.

Internet and mobile video

We continue to note many transactions involving internet and mobile video technologies. In 3Q11, these included one in which Amazon.com, Inc. purchased a UK-based developer of internet video players, Google's purchase of facial recognition technology, Research In Motion Ltd.'s purchase of video editing software for smartphones and several video-sharing social network sites. One of the video-sharing site deals was a pending purchase by Renren, Inc. for \$79.9 million. The other deals mentioned were completed but had no disclosed value.

Health care IT deals

The second-largest 3Q11 health care IT deal was a pending \$906 million proposal by defense contractor General Dynamics Corporation to purchase Vangent, Inc., which provides health care IT services to military, commercial customers and US federal agencies. The deal is part of a growing trend of defense contractor diversification as government spending slows.²⁸

Other health care IT deals were many and varied in 3Q11. They included cloud-based care coordination services, clinical documentation technologies, automated medical transcription technology, billing and workflow software and a UK-based social networking site for doctors. Sony Corporation subsidiary M3 Global Research acquired that social networking site, Doctors.net.

Will global technology M&A hit "pause"?

In 3Q11, global technology M&A provided a counterpoint to the global macroeconomic malaise prevalent in headlines. The waves of innovation that technology companies have been delivering around smart mobility, cloud computing, social networking, business intelligence/analytics and so many other new technologies are truly exciting. Transforming that innovation into economically actionable products and services often requires significant M&A activity. In this report, we've seen how that activity causes these trends to intersect with each other, and how it enables innovation in non-technology industries such as health care, financial services and education.

But can such robust technology M&A values be maintained in the face of continued macroeconomic uncertainty and extreme equities markets volatility? At some point, determining correct valuations becomes challenging, indeed. We've already seen M&A volume decline 5% from 1Q11 to 3Q11. But our analysis suggests that the current level of between 700 and 800 deals per quarter may be the sectors naturally sustainable level, and will only change significantly during bubbles or recessions. In terms of values, because it's been 11 years since the last time there were two or more deals above \$10 billion in the same quarter, we expect aggregate and average values to drop in the fourth quarter.

However, in the long run the disruptive technology megatrends described above are certain to drive increasing strategic deal-making among global technology companies. And we're in it for the long run.

“Big data” also drives many smaller deals

Although it was the largest by far, HP-Autonomy was by no means the only 3Q11 deal involving business intelligence/analytics.

Many of the others were focused on either financial services or e-commerce/marketing/advertising analytics that look at customer behavior on the web and on mobile devices (including in social networks). Several exemplify the integration of trends we noted this quarter because they involve big data, mobility and social networking, often all at the same time.

The next-largest business intelligence/analytics deal after HP-Autonomy was International Business Machines Corporation's \$387.8 million purchase of Algorithmics Inc., a provider of financial risk analysis software to the financial services industry.²⁹ Vista Equity Partners LLC's pending \$200 million purchase of the Kondor business from Thomson Reuters Corporation also targets financial services. Kondor provides liquidity risk systems for treasury and cash management operations.³⁰

Interestingly, there were also at least two deals involving crime-fighting analytics. IBM announced a deal to buy i2 Inc., which provides visual pattern-recognition analytics to police forces and military agencies, for an undisclosed amount.³¹ And Israel-based customer relations and risk management software provider Nice Systems Ltd. announced a \$79.2 million deal to buy UK-based The Fizzback Group Ltd., whose software obtains and analyzes real-time customer feedback on the web, on mobile devices and in social networks.³² Nice counts security agencies among its primary customers, and also supplies fraud-fighting software to the financial services industry.

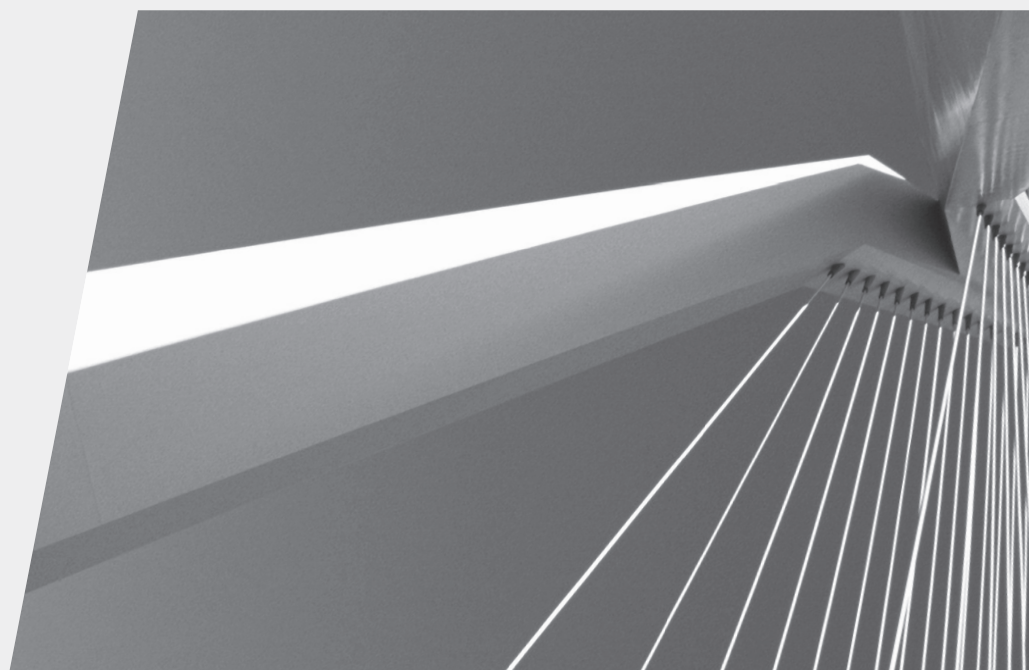
Web and social analytics

There were many deals involving web and social analytics. Twitter, Inc. completed two analytics deals, one to help surface the most relevant content for a given user and the other to help publishers understand the impact and influence of their tweets.^{33,34} Both acquired companies were small start-ups, and the deals had no disclosed values.

Webtrends, Inc., a provider of unified mobile, social and web analytics, obtained real-time analytics through its non-disclosed value purchase of Reinvigorate, Inc.³⁵ Verint Systems Inc. announced a \$76.4 million deal for Vovici Corporation. Verint plans to combine Vovici's online survey product with its own call center monitoring and social media “listening” products into a single customer analytics platform.³⁶

The analytics trend continues

The deals that surfaced in 3Q11 may well herald a significant trend. As we prepared this report in October, two more business intelligence/analytics deals were announced. IBM (which has purchased more than two dozen business intelligence companies over the last five years³⁷) announced a deal to buy Q1 Labs Inc., whose technology uses data analytics to detect information security breaches.³⁸ And Oracle announced a plan to buy Endeca Technologies Inc., whose technology (like Autonomy's) focuses on making sense of unstructured data.³⁹





Whither will technology valuations go?

Global technology M&A valuation trends appear to have disconnected from other industries in the third quarter of 2011. While the aggregate value of global M&A transactions in all industries experienced an 18% sequential and 21% YOY decline in 3Q11⁴⁰, the corresponding figure for global technology M&A increased 8% sequentially and 22% YOY. What's more, the average value per deal of technology transactions with disclosed values increased to \$221 million, an 11-year high.

“Technology valuations will likely moderate unless macro conditions improve. But we’ll continue to see strategically important deals with large premiums from time to time.”

Jeff Liu
Group Head, US Technology
Lead Advisory, M&A

Can technology M&A values continue to climb, or even maintain their current lofty level?

Published reports have attributed the all-industry M&A decline on equities market volatility amid global economic uncertainty, which makes it difficult to establish stable valuations. All over the world, deal-makers are hitting the “pause” button because volatility is making it difficult to price and execute deals.⁴¹ Technology-focused deals appear to be the exception.

“We’re in a down cycle economically,” states Jeff Liu, Group Head, US Technology Lead Advisory, M&A. “The drivers are obvious: concern about the possibility of defaults, both of sovereigns and of banks, and the slowing of growth in emerging markets because of concerns about their traditional export markets – the US and Europe.” As a result, most buyers and sellers recognize that there will be a meaningful period of recovery required before markets and economies can return to a normal state of growth – or even a “new normal,” i.e., a lower level of sustained growth. And all of that feeds into decisions by buyers to reset valuations lower, and a weaker basis on which sellers can argue for higher valuations. The result is a disconnect in valuation expectations between buyers and sellers that will slow or kill deals, at least until market dynamics play out further.

In terms of technology M&A, however, there are countervailing forces at work.

Jeff explains: “Technology is an industry driven by innovation and new markets. And right now, the industry is pursuing several major opportunities for new growth and new market creation that are quite independent of the economic environment. These include cloud computing, social networking, gaming and the hyper growth of smart mobility and mobile services. So with technology companies, there often is more emphasis on strategic acquisitions of companies than on looking for bargains in this challenging economic environment.”

Jeff emphasizes that this view does not suggest a lack of discipline. “Technology buyers are still extremely disciplined about the near-term forecasts that factor into their decisions to buy companies,” he states. What’s different is the weighting of strategic factors in the buying equation. “In technology, if a company sees strategic value in a mobile deal, or if a hardware company recognizes it is going to be important to have cloud-based solutions in their product portfolio, they are going to go ahead because of the strategic imperative represented by those assets.”

Unfortunately, technology’s lofty 3Q11 average values may not be sustainable in the short term. Buyers still have to reconcile valuations with top-line and bottom-line multiples. And as the global economy slows, the values being multiplied are shrinking.

Of note, looking deeper into the technology industry’s \$221 million average value for 3Q11, we see that the average value of deals announced in July and August was \$271 million but September deals averaged just \$104 million. So technology valuations may already be moderating.

“While it’s difficult to predict whether technology deal valuations will actually fall in the next quarter – or by how much – the industry’s overall long-term prospects are a no-brainer,” Jeff says.

“There is a tremendous amount of technology innovation that is ready for prime time right now, and that is opening up new opportunities for young companies and forcing large companies to change,” he notes. “When historians look back at this time, aside from the economic uncertainty that we know is here, they will say this period of technology innovation was as important as the emergence of the internet, or the switch from mainframe computers to PCs, in terms of the impact it is having on the consumer and on businesses.”



“Mobile, cloud and social trends are driving technology innovation and M&A activity. These areas will continue to drive technology sector growth for the foreseeable future.”

Joe Steger
Global Technology
Transaction Advisory Services Leader

Look ahead

Watch for the evolution of the following trends to continue to shape technology industry M&A activity in the coming quarters:

- ▶ After a spike in 2Q11, sequential average deal values increased by 14% in 3Q11. Can values go even higher (given the current environment of macroeconomic uncertainty), or have we seen the near-term peak?
- ▶ Smart mobility drove the largest technology M&A deal in three years in 3Q11 – in addition to the usual dozens of smaller deals. Will the next few quarters see more big-ticket deals, more small deals, or a combination of the two?
- ▶ After returning to a pre-recession “normal” level in 2Q11, PE aggregate value soared another 82% in 3Q11 – but slowed in the final month of the quarter. Will favorable credit markets drive PE deal-making upward going forward, or will double-dip global recession concerns hold it back?
- ▶ Cross-border deal volume and values declined sequentially in 3Q11, while IB grew. Is this a pause in CB deal growth or the reversal of an 18-month trend in which CB deal volume and value outpaced IB?
- ▶ US corporate deal-makers did 25% of their deals across borders in 3Q11, compared with 46% for the rest of the world. Will US companies increase CB deal-making in an attempt to realize more value from cash “held” overseas? And if not, how will increasing cash influence their capital agenda?
- ▶ We anticipated a rise in “big data” analytics deals in 3Q11 and were rewarded with roughly two dozen deals overall and the second-largest deal of the quarter. But technology companies are still at the beginning of this trend’s major growth, as businesses attempt to make sense of the growing volume of data created by the daily interaction between them and their customers via fixed-line and wireless networks. Will deal volume (if not value) continue to rise?
- ▶ Will the move to mobile and social online games continue to drive increasing deal volume?
- ▶ Will increasing usage of internet and mobile video by consumers and businesses continue to drive deals across all sectors?
- ▶ The market for renewable energy and energy efficiency technologies appears to have weakened this year. Will this drive a round of consolidation?
- ▶ Non-technology company participation in global technology M&A fell to 3% of disclosed value in 3Q11 from 7% in 2Q11 and roughly 15% for the previous five quarters. Where have all the non-technology buyers gone – and will they return?
- ▶ Will semiconductor consolidation we saw earlier in the year continue? Will we see continual consolidation in other sectors?
- ▶ The growth of cloud computing and smart mobility is fueling an increasing need for information security solutions – which drove an increasing number of 3Q11 deals for security technologies across many sectors. Will security-related M&A growth continue its upward trend?
- ▶ Will the current technology-enabled trends and innovation continue to drive deals, irrespective of the global macroeconomic environment? (For insight into economic outlook, from the perspective of global technology executives, see Ernst & Young’s *Capital Confidence Barometer: Focused on growth – Global M&A activity and volatility coexist.*)

Figure 5: Global technology corporate and PE transactions scorecard by sector, 3Q11

	Number of deals						Average value (\$m)											
	3Q10	3Q	4Q	1Q	2Q	3Q	3Q11	Sequential % change	YOY % change	3Q10	3Q	4Q	1Q	2Q	3Q	3Q11	Sequential % change	YOY % change
Corporate deals by sector (based on buyer sector)																		
CE	37						48	9% ▲	30% ▲	\$189						\$46	-67% ▼	-76% ▼
CPE	73						85	-10% ▼	16% ▲	\$217						\$365	163% ▲	68% ▲
Internet	110						113	2% ▲	3% ▲	\$67						\$550	596% ▲	721% ▲
IT services	145						192	15% ▲	32% ▲	\$181						\$54	-45% ▼	-70% ▼
Semiconductors	43						51	16% ▲	19% ▲	\$453						\$207	-53% ▼	-54% ▼
Software	193						189	-22% ▼	-2% ▼	\$75						\$69	-65% ▼	-8% ▼
Total	601						678	-3% ▼	13% ▲	\$168						\$182	1% ▲	8% ▲
PE deals by sector (based on seller sector)																		
CE	4						4	0% -	0% -	\$66						\$118	N/A -	79% ▲
CPE	6						12	1,100% ▲	100% ▲	\$0						\$1,044	N/A -	N/A -
Internet	23						8	-20% ▼	-65% ▼	\$238						\$781	410% ▲	228% ▲
IT services	20						24	50% ▲	20% ▲	\$706						\$109	-79% ▼	-85% ▼
Semiconductors	7						1	-75% ▼	-86% ▼	\$1						\$1	-100% ▼	0% -
Software	39						32	-22% ▼	-18% ▼	\$91						\$768	117% ▲	744% ▲
Total	99						81	7% ▲	-18% ▼	\$231						\$584	74% ▲	153% ▲
Total deals by sector																		
CE	41						52	8% ▲	27% ▲	\$177						\$51	-63% ▼	-71% ▼
CPE	79						97	2% ▲	23% ▲	\$206						\$444	219% ▲	116% ▲
Internet	133						121	0% -	-9% ▼	\$106						\$574	492% ▲	442% ▲
IT services	165						216	18% ▲	31% ▲	\$236						\$59	-54% ▼	-75% ▼
Semiconductors	50						52	8% ▲	4% ▲	\$418						\$200	-54% ▼	-52% ▼
Software	232						221	-22% ▼	-5% ▼	\$77						\$161	-26% ▼	109% ▲
Total	700						759	-2% ▼	8% ▲	\$176						\$221	14% ▲	26% ▲

CE = Communications equipment
CPE = Computers, peripherals and electronics

Deal volume has declined slightly in each of the last two quarters, declining 2% each in 2Q11 and 3Q11. The software and IT services sectors appeared to be trading off bursts of volume growth, while the other sectors remained relatively stable. Software deals spiked in 2Q11 and declined 22% in 3Q11, while IT services enjoyed an 18% sequential increase in 3Q11, the largest of any sector.

In terms of average value, big-ticket deals continued to affect most sectors. The huge sequential and YOY growth in average value for the internet sector was due to Google's \$11.9 billion pending purchase of Motorola Mobility. The only other sector that enjoyed a spike in average value was CPE, as a result of HP's \$10.2 billion purchase of Autonomy (Figure 1, page 4). Many other sectors experienced declines due to big-ticket deals in previous periods. Microsoft's \$8.6 billion deal to buy Skype Technologies SA, for example, boosted the software sector's 2Q11 average value. Likewise, two semiconductor sector consolidation deals worth a combined total of \$10.8 billion in 2Q11 caused that sector's sequential decline in 3Q11. Meanwhile, the year-ago period was the quarter in which Intel announced its \$7.3 billion deal to buy McAfee, Inc., thus precipitating the sector's YOY decline.

Note: average value based on deals with disclosed values.

Source: Ernst & Young analysis of FactSet Mergerstat data, accessed 6 October 2011.

Figure 6: Cross-border corporate and PE transactions scorecard by sector, 3Q11

	Number of deals						Average value (\$m)											
	3Q10	3Q	4Q	1Q	2Q	3Q	3Q11	Sequential % change	YOY % change	3Q10	3Q	4Q	1Q	2Q	3Q	3Q11	Sequential % change	YOY % change
Corporate deals by sector (based on buyer sector)																		
CE	16						23	28% ▲	44% ▲	\$439						\$41	-85% ▼	-91% ▼
CPE	32						39	-11% ▼	22% ▲	\$165						\$791	193% ▲	379% ▲
Internet	26						25	-31% ▼	-4% ▼	\$28						\$28	-33% ▼	0% -
IT services	42						64	-4% ▼	52% ▲	\$265						\$52	-41% ▼	-80% ▼
Semiconductors	21						18	-10% ▼	-14% ▼	\$202						\$162	110% ▲	-20% ▼
Software	72						74	-26% ▼	3% ▲	\$134						\$46	-87% ▼	-66% ▼
Total	209						243	-15% ▼	16% ▲	\$187						\$189	-18% ▼	1% ▲
PE deals by sector (based on seller sector)																		
CE	2						1	-50% ▼	-50% ▼	2						1	-50% ▼	-50% ▼
CPE	1						5	N/A -	400% ▲	1						5	N/A -	400% ▲
Internet	10						1	-67% ▼	-90% ▼	10						1	-67% ▼	-90% ▼
IT services	6						10	67% ▲	67% ▲	6						10	67% ▲	67% ▲
Semiconductors	2						0	-100% ▼	-100% ▼	2						0	-100% ▼	-100% ▼
Software	13						17	21% ▲	31% ▲	13						17	21% ▲	31% ▲
Total	34						34	31% ▲	0% -	34						34	31% ▲	0% -
Total deals by sector																		
CE	18						24	20% ▲	33% ▲	\$389						\$39	-86% ▼	-90% ▼
CPE	33						44	0% -	33% ▲	\$156						\$799	196% ▲	412% ▲
Internet	36						26	-33% ▼	-28% ▼	\$106						\$25	-81% ▼	-76% ▼
IT services	48						74	1% ▲	54% ▲	\$435						\$52	-42% ▼	-88% ▼
Semiconductors	23						18	-14% ▼	-22% ▼	\$188						\$162	110% ▲	-14% ▼
Software	85						91	-20% ▼	7% ▲	\$128						\$130	-61% ▼	2% ▲
Total	243						277	-11% ▼	14% ▲	\$212						\$224	-2% ▼	6% ▲

CE = Communications equipment
 CPE = Computers, peripherals and electronics

The trend of increasing internationalization of the technology industry paused in 3Q11 – at least as exemplified by the run-up in CB deals as a percentage of all transactions. Beginning in 2009 at 31% of all deals (IB and CB), CB deal volume increased to 34% in 2010 and then peaked at 40% in 2Q11. But for 3Q11, the volume of CB deals declined 11% to 277 deals from the 2Q11 high of 311.

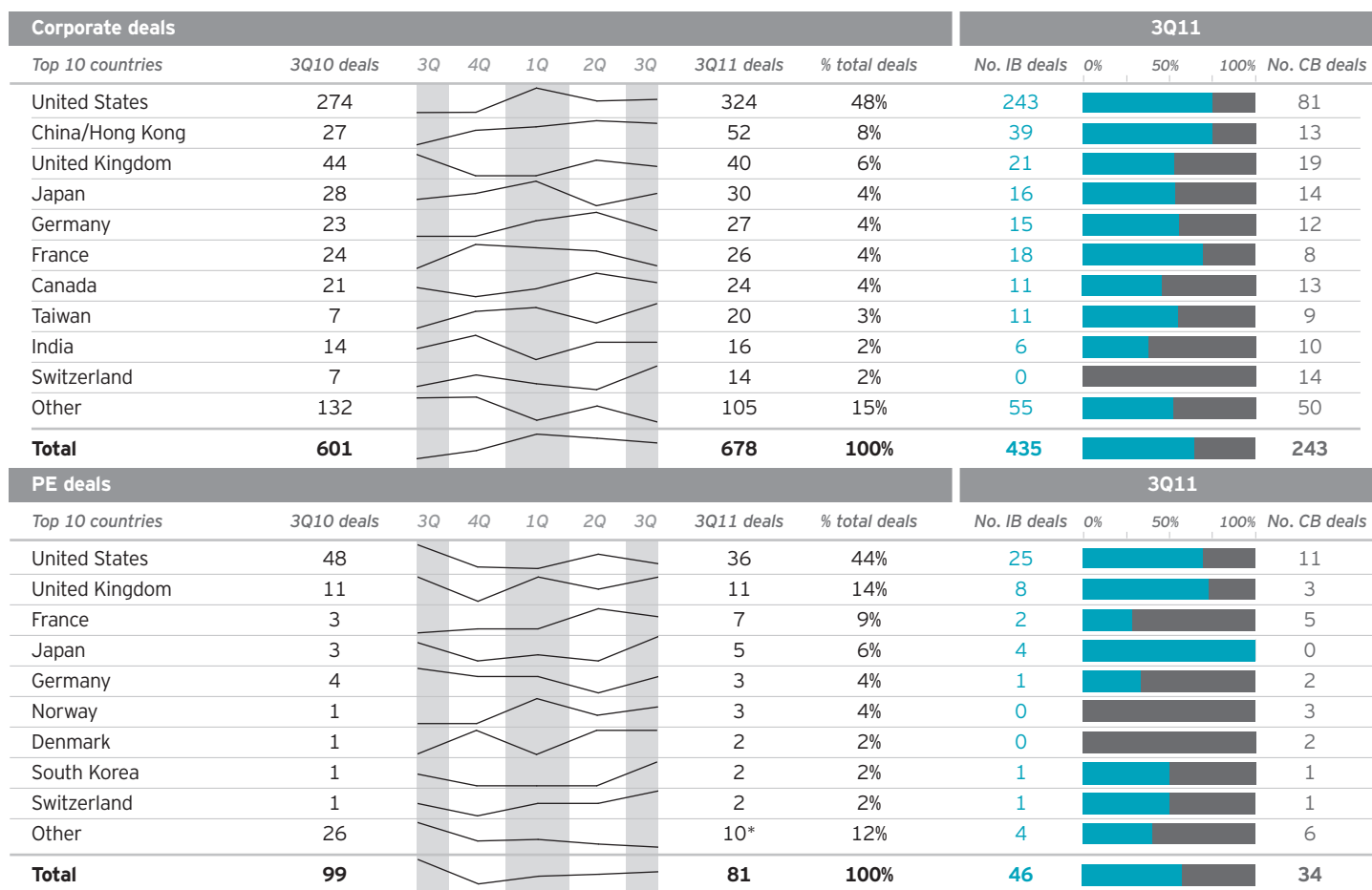
Average value of CB deals was also increasing faster than that of all deals in the first half of 2011. But in 3Q11, average value declined 2% sequentially and increased just 6% YOY, compared with all-deal average value growth of 14% sequentially and 26% YOY (Figure 3, page 7). At \$224 million, however, the average value of CB deals remained slightly higher than that of all deals (\$221 million).

Note: average value based on deals with disclosed values.

Source: Ernst & Young analysis of FactSet Mergerstat data, accessed 6 October 2011.



Figure 7: Global corporate and PE deals by acquiring country: cross-border and in-border, 3Q11



China's rapid ascent continued to be the big country story in 3Q11. China's 52 deals listed above, with 13 (25%) being CB, brought China's total number of deals so far in 2011 to 156 – compared with full-year volume of 132 deals in 2010 and 86 deals in 2009. China displaced the UK as the No. 2 corporate buyer in 4Q10 and has remained in that spot since. The US was still the dominant country buyer, accounting for 47% of all 3Q11 global technology M&A transactions and 33% of CB deal volume. Overall, corporate CB deal volume has fallen 15% sequentially to 243 deals and from 40% of corporate deals in 2Q11 to 36% of corporate deals in 3Q11.

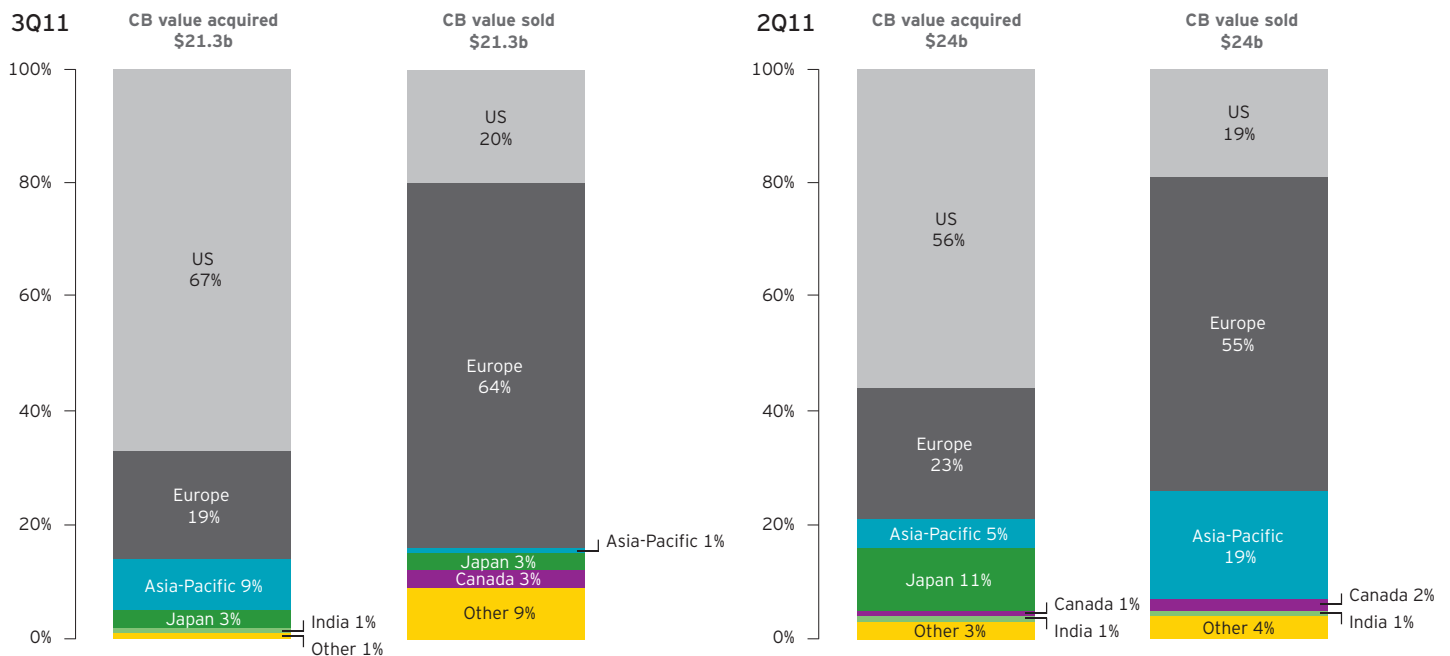
Meanwhile, CB deal volume for PE firms is climbing. It increased 31% sequentially to 34 deals in 3Q11 from 26 deals in 2Q11. It was flat YOY at 34 deals in both periods. But those 34 deals represented 42% of PE's 81 deals in 3Q11, as compared with 34% of PE's 99 deals in 3Q10.

*Additional countries with one PE deal: Belgium, Canada, Cayman Islands, China/HK, India, Malaysia, Romania, Russia, Saudi Arabia and Sweden.

Note: percentages may not total 100 due to rounding.

Source: Ernst & Young analysis of FactSet Mergerstat data, accessed 6 October 2011.

Figure 8: Cross-border deal value flow for technology deals (disclosed value), 3Q11 versus 2Q11



For the third consecutive quarter, Europe was the largest net seller (\$13.6 billion) and the US was the largest net buyer (\$14.4b) in 3Q11 – largely on the strength of the same deal. HP's \$10.2 billion purchase of UK-based Autonomy represented 71% of the value acquired by US companies and 75% of the value sold by European companies.

The third quarter was also notable for reversing a 2011 trend in which aggregate CB deal value grew faster than IB aggregate value. Instead, 3Q11 CB deal value fell 11% to \$21.3 billion from \$24 billion in 2Q11, while IB value increased 25% to \$35.1 billion in 3Q11 from \$28 billion in 2Q11. The aggregate CB deal value that crossed borders in 3Q11 was 38% of all aggregate value for the quarter, falling sequentially from 46% of all value in 2Q11 and slightly lower than 40% in 1Q11 and 41% for all of 2010.

- ▶ The HP-Autonomy deal accounted for 48% of aggregate CB deal value
- ▶ Within Europe, US companies were the largest buyers, accounting for 95% of the CB value acquired (\$13 billion)
- ▶ Intra-European cross-border deals hit their lowest total value in the past year, accounting for only \$425 million (3%) of the European value sold – well below the \$2 billion in 2Q11 and \$693 million in 1Q11
- ▶ The largest CB deal with a European buyer was UK-based CVC Capital Partners' \$1.9 billion acquisition of US-based ConvergEx – it accounted for 69% of the CB value acquired by Europe
- ▶ Taiwan accounted for 66% of the Asia-Pacific region's CB deals (\$1.2 billion); companies in the US and Japan were the key acquisition targets

Source: Ernst & Young analysis of FactSet Mergerstat data, accessed 6 October 2011.





Source notes

As we went to press, the following pending deals were completed:

Electronic Arts/PopCap Games

"Electronic Arts closes takeover of PopCap Games," M&A Navigator, 15 August 2011, via Dow Jones Factiva, © 2011 M2 Communications.

HP/Autonomy

"HP closes Autonomy deal," Reuters News, 3 October 2011, via Dow Jones Factiva, © 2011 Reuters Limited.

NCR/Radiant Systems

"NCR Corporation Completes Acquisition Of Radiant Systems, Inc.," Reuters Significant Developments, 24 August 2011, via Dow Jones Factiva, © 2011 Reuters Limited.

Providence Equity Partners/Blackboard

"Providence Equity Partners Completes Acquisition Of Blackboard, Inc.," Reuters Significant Developments, 4 October 2011, via Dow Jones Factiva, © 2011 Reuters Limited.

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- ⁶ "Google CEO Page Speaks at Zeitgeist Conference," Dow Jones News Service, 27 September 2011, via Dow Jones Factiva, © 2011 Dow Jones & Company, Inc.
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- ⁹ *Global technology M&A update, April-June 2011*, Ernst & Young.
- ¹⁰ *Understanding What Matters*, Autonomy Annual Report, 2003.
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- ¹⁸ "ConvergEx To Abandon IPO In Private-Equity Deal With CVC Capital," Dow Jones Business News, 20 July 2011, via Dow Jones Factiva, © 2011 Dow Jones & Company, Inc.
- ¹⁹ "Blackboard to go private for \$1.64 bln," Reuters News, 1 July 2011, via Dow Jones Factiva, © 2011 Reuters Limited.
- ²⁰ "Advent in talks to buy control of Oberthur," Reuters News, 4 August 2011, via Dow Jones Factiva, © 2011 Reuters Limited.
- ²¹ "ATM maker NCR to buy Radiant for \$1.2 bln," Reuters News, 11 July 2011, via Dow Jones Factiva, © 2011 Reuters Limited.
- ²² "Electronic Arts buying PopCap Games for up to \$1.3 bln," Reuters News, 12 July 2011, via Dow Jones Factiva, © 2011 Reuters Limited.
- ²³ Ibid.
- ²⁴ Ibid.
- ²⁵ "Tencent to acquire 16 pct of Kingsoft," Reuters News, 6 July 2011, via Dow Jones Factiva, © 2011 Reuters Limited.
- ²⁶ "Verizon buys CloudSwitch to boost Terremark," Reuters News, 25 August 2011, via Dow Jones Factiva, © 2011 Reuters Limited.
- ²⁷ Ibid.
- ²⁸ "General Dynamics to buy healthcare IT firm," Reuters News, 16 August 2011, via Dow Jones Factiva, © 2011 Reuters Limited.
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- ³¹ "IBM buys British security analytics firm i2," Reuters News, 31 August 2011, via Dow Jones Factiva, © 2011 Reuters Limited.
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- ³⁷ *Global technology M&A update, July-September 2010*, Ernst & Young.
- ³⁸ "IBM to Buy Security Analytics Firm," *The Wall Street Journal Online*, 4 October 2011, via Dow Jones Factiva, © 2011 Dow Jones & Company, Inc.
- ³⁹ "Oracle to Buy Endeca Technologies," *The Wall Street Journal Online*, 18 October 2011, via Dow Jones Factiva, © 2011 Dow Jones & Company, Inc.
- ⁴⁰ "Deals Dry Up as Markets Gyrate," WSJ.com, 3 October 2011, <http://online.wsj.com/article/SB10001424052970204010604576597301007244360.html>.
- ⁴¹ Ibid.

Methodology

- ▶ *Global Technology M&A update: July-September 2011* is based on Ernst & Young's analysis of FactSet Mergerstat data for 2010 and 2011. Deal activity and valuations may fluctuate slightly based on the date the FactSet Mergerstat database is accessed.
- ▶ Technology company M&A data was pulled from the FactSet Mergerstat database based on the companies' respective standard industrial classification (SIC) codes for computers, peripherals and electronics; communication equipment; semiconductors; software; IT services; and internet companies.
- ▶ Technology deals included M&A transactions between:
 - Two technology companies
 - Technology companies acquiring companies in other industries
 - Non-technology companies acquiring technology companies, deals valued at over \$100 million
 - Management consulting companies acquiring technology companies (IT consulting deals valued at over \$500 million)
- ▶ Joint ventures were not included.
- ▶ Corporate M&A activity data was analyzed based on the classification of the acquiring company.
- ▶ For non-technology company acquirers, deals were classified based on the technology sector of the seller.
- ▶ Equity investments were included (corporate and PE).
- ▶ PE M&A activity includes both full and partial stake transactions and was analyzed based on acquisitions by firms classified as private equity, sovereign wealth funds, investment holding companies, alternative investment management groups, certain commercial banks, investment banks, venture capital and other similar entities.
- ▶ Unsolicited technology deal values were not included in the dataset, unless the proposed bid was accepted and the deal closed based on FactSet Mergerstat data available at the time of analysis.
- ▶ The value and status of all deals highlighted in this report are as of 30 September 2011, unless otherwise noted.
- ▶ All dollar amounts are in US dollars, unless otherwise indicated.
- ▶ Top 25 companies identified are based on average ranking of market value and sales as of 1 January 2011 (Figure 2, page 6).
- ▶ Only disclosed deal values (as per FactSet Mergerstat) are used in all value analyses.
- ▶ As used in this report, "total value" refers to the aggregate value of deals with disclosed values for the period under discussion.
- ▶ Disclosed deal values in this report may vary from published values because FactSet Mergerstat database methodology automatically subtracts cash acquired, net of debt, from enterprise value.



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