



# Technology & Business Services

## Key Developments

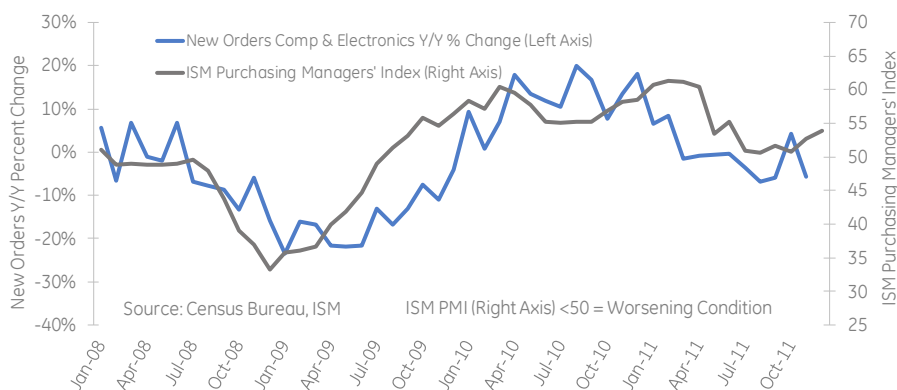
- According to **Gartner**, worldwide IT spending is forecast to total \$3.8 trillion in 2012, a 3.7 percent increase from 2011. In 2011, worldwide IT spending totaled \$3.7 trillion, up 6.9 percent from 2010 levels.
- **General Electric** and **Microsoft** are forming a joint venture to develop and sell software systems to make it easier for healthcare providers to store, access and share patient information. The 50-50 venture, which is yet to be named, will initially employ about 700 people and be based near Microsoft's headquarters in Redmond, Washington. **Michael Simpson**, a **GE Healthcare** executive, will serve as CEO of the new venture when it begins operations later this year.
- According to the **Consumer Electronics Association (CEA)**, global spending on consumer technology devices is projected to increase 5% in 2012 and exceed \$1 trillion compared to 8% growth and sales of \$993 billion in 2011.



## Industry Fundamentals

The recent earnings reports of large tech bellwethers confirmed concerns about slowing growth in enterprise IT spending but showed few signs of a dramatic drop-off that some forecasters had feared. Despite an improvement in various macro economic indicators including consumer confidence, purchases of consumer electronics in the U.S. dropped 5.9% this past holiday season as smartphones and tablets cannibalized other products.

### Computer Orders & Purchasing Managers' Index

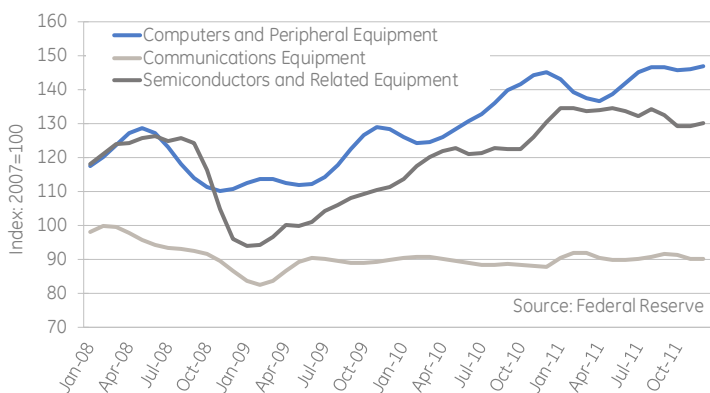


**The Purchasing Managers' Index (PMI), which is a measure of near-term business optimism and is highly correlated with orders for new computer equipment, has been trending higher for the past two months.** The December PMI of 53.9 was up 1.2 points compared to November and is the 29<sup>th</sup> consecutive month with a reading above 50 indicating that the manufacturing economy is generally expanding. Computer equipment orders, which lag the PMI and are still declining year-over-year, have historically bottomed following a sustained upturn in the PMI.

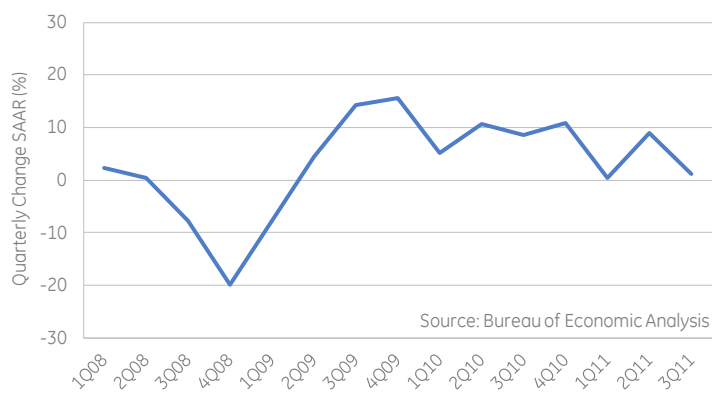
## Macro Supply & Demand Indicators

Despite capital market turbulence, macro indicators that reflect current and near-term conditions for IT spending were generally stable throughout 2011. However, falling capacity utilization typically signals a potential accumulation of inventory in the IT hardware supply chain. Demand-side indicators (right side exhibits below) are mixed with actual IT capex growing slowly while the ISM services index, which we view as a leading indicator for IT spending, has been surprisingly resilient.

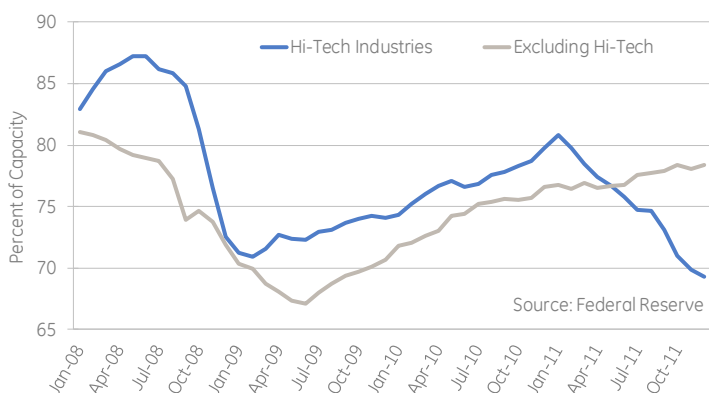
### Industrial Production



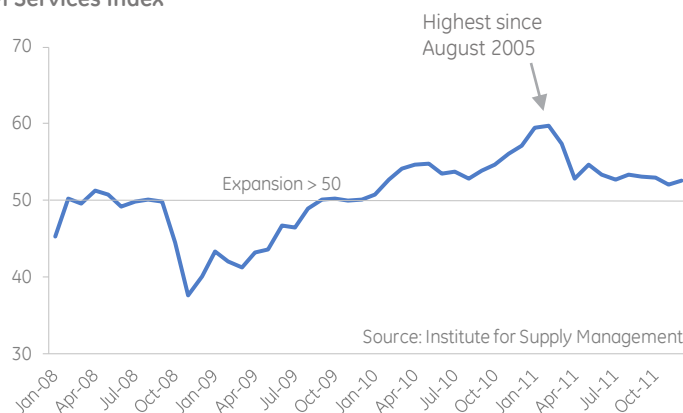
### Total Information Processing Equipment & Software Capex Growth



### Capacity Utilization



### ISM Services Index



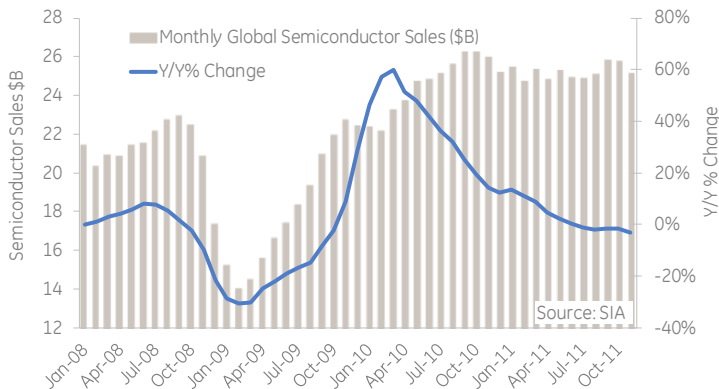
- **Industrial production of computer, semiconductor and communications related equipment remains in a stable to moderate growth phase.** As of December, the indices for the production of computer and communications related equipment had risen 1.2% and 2.7% year-over-year, respectively. Production of semiconductor related equipment was down a modest 0.1% year-over-year.
- **Technology related capacity utilization continues to fall, while non-tech capacity utilization continues to nudge slightly higher.** As of December, technology related capacity utilization had declined for 11 consecutive months and is now at its lowest point since the end of 2003.

- **Growth of private fixed investment in information processing equipment and software remained positive but slowing during the 3<sup>rd</sup> quarter.** During the 3<sup>rd</sup> quarter, annualized investment increased 0.7%, down from 8.9% during the 2<sup>nd</sup> quarter.
- **Economic activity in the services sector, which constitutes the largest segment of the economy and is a large consumer of IT products and services, expanded in December for the 25<sup>th</sup> consecutive month.** The Non-manufacturing Index (NMI) was 52.6 in December. Although the reading continues to indicate a generally expanding services sector, momentum has leveled off with the index remaining slightly below the six month average of 52.8.

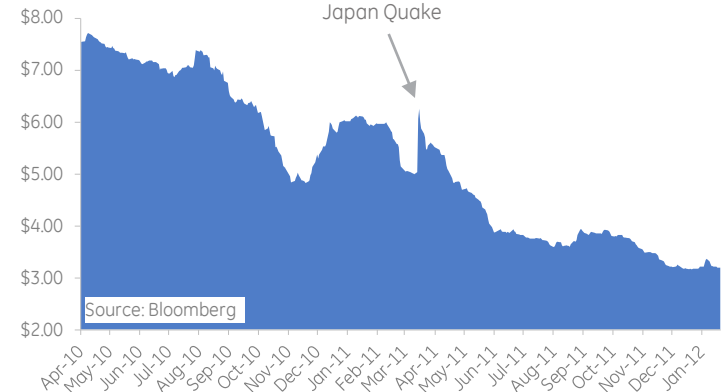
## Electronic Components Supply Chain Indicators

Supply chain disruptions due to flooding in Thailand coupled with overhanging concerns about the global macro economy, particularly slowing growth in China, remain the primary near-term concerns for the global electronics components supply chain. Overall, the outlook for moderate but positive global enterprise IT and consumer electronics spending in 2012 should translate to similar dynamics for the component supply chain. Current Gartner forecasts call for worldwide semiconductor sales to reach \$309 billion in 2012, a 2.2% increase from 2011 but lower than an earlier forecast of 4.6% growth.

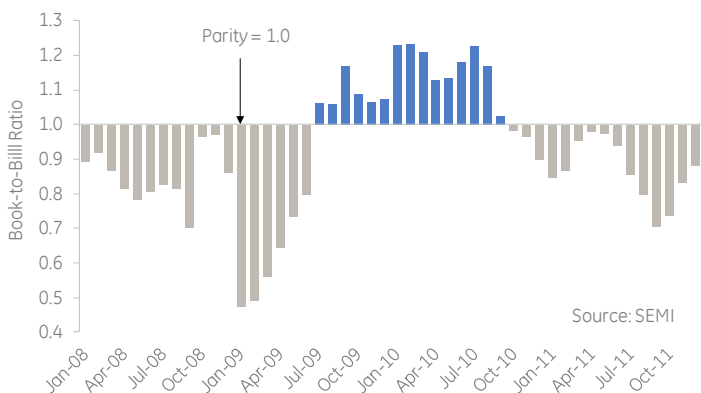
### Global Semiconductor Sales



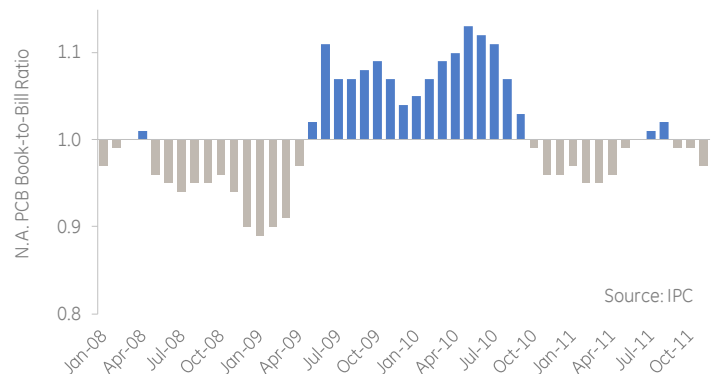
### Flash Memory Spot Pricing



### Semiconductor Capital Equipment Book-to-Bill



### Printed Circuit Board Book-to-Bill



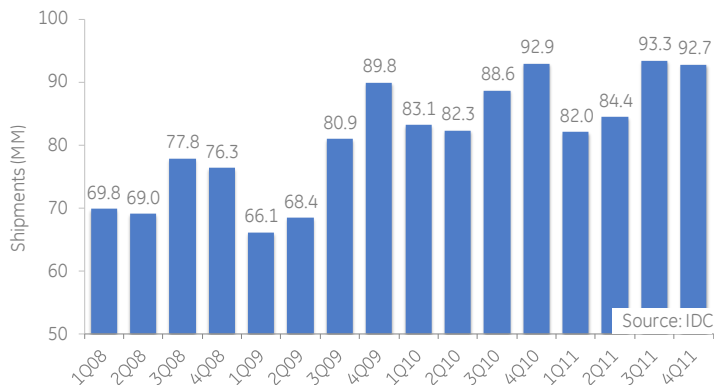
- **Global sales of semiconductors were up 0.8% YTD through November although growth has continued to slow in recent months.** Global sales of semiconductors were \$25.1 billion in November, down 2.4% from the prior month and down 3.1% compared to sales of \$25.9 billion in November 2010.
- **Global semiconductor capital equipment sales in December increased 11.8% month-over-month but were 25.2% lower year-over-year.** Orders are showing a similar pattern by increasing 18.5% month-over-month while declining 27% year-over-year. Putting these dynamics together, the semi capital equipment book-to-bill remains below parity at 0.88 but well above a recent low of 0.71.

- **Steady demand stabilizing flash memory pricing.** Spot prices of NAND flash initially shot up 25% immediately after the disaster in Japan but have since resumed a capacity induced downward trend. That said, NAND spot prices have recently found support from ongoing strong demand for flash intensive devices such as smartphones and tablets.
- **Following typical seasonal strength, printed circuit board (PCB) sales and orders were up in November compared to October.** The PCB book-to-bill of 0.97 in November points to lackluster near-term sales.

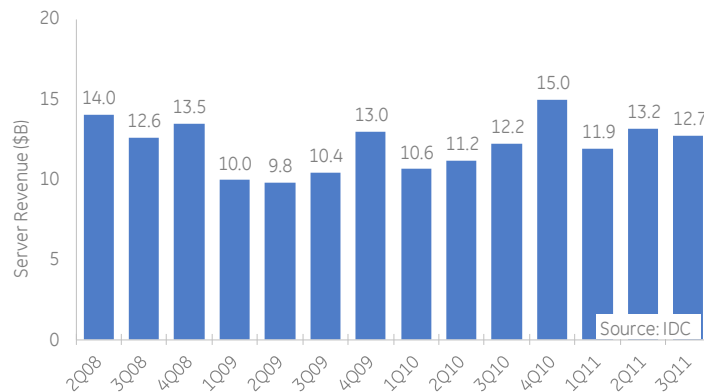
## Hardware Systems

Despite longer-term concerns regarding the ongoing adoption of public cloud computing models, the onsite enterprise hardware refresh cycle remains intact with strong sales of enterprise class servers, storage, networking equipment etc. However, HDD supply disruptions due to flooding in Thailand coupled with weak spending trends among consumers and public entities are causing PC shipment volumes to fall short of estimates.

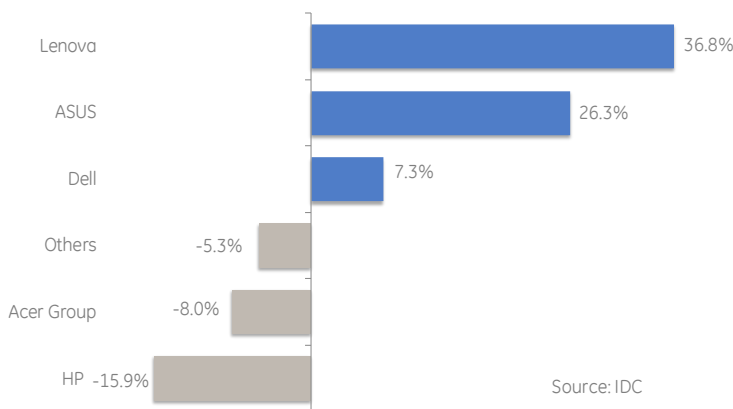
Global PC Unit Shipments (MM)



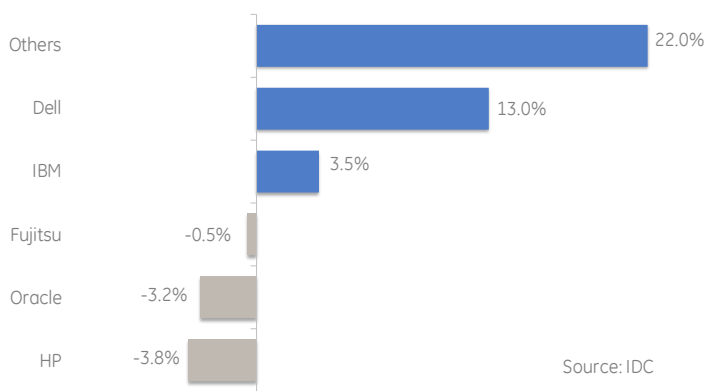
Global Server Revenue (\$B)



PC OEM Y/Y Growth (4<sup>th</sup> Quarter 2011)



Server OEM Y/Y Growth (3<sup>rd</sup> Quarter 2011)

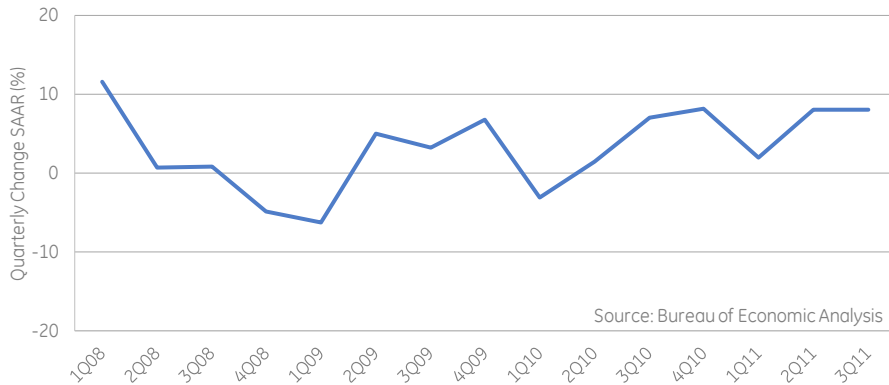


- According to IDC, global PC shipments increased 1.6% while the U.S. PC market fell for the first time in a decade in 2011, hurt by weak consumer spending, HDD supply shortages, and competition from smartphones and tablets. PC shipments in the U.S. fell 4.9% to 71.3 million in 2011. IDC currently expects a slight rebound in PC shipments during 2012 of 2% and 5% in the U.S. and globally, respectively.
- With the worst performance among major PC vendors in the 4<sup>th</sup> quarter, HP is losing its grip on its global leadership position with unit share of 16% vs. 14% for rapidly rising 2<sup>nd</sup> place Lenovo. Lenovo continued to take significant market share in the 4<sup>th</sup> quarter with global unit growth of 37%. Ongoing dominance in Asia coupled with a successful 3<sup>rd</sup> party distribution strategy elsewhere continues to result in overall market share gains for Lenovo.

- Updated 4<sup>th</sup> quarter global server revenue will be published in our February update. Server demand was relatively stable although year-over-year growth is beginning to moderate. 3<sup>rd</sup> quarter server shipments increased 4.0% year-over-year, which is down from the 8.7% growth reported in the 2<sup>nd</sup> quarter. Revenue increased 4.2% to \$12.7 billion during the 3<sup>rd</sup> quarter, which was down from 17.9% growth during the 2<sup>nd</sup> quarter but still the seventh consecutive quarter of year-over-year revenue growth.
- For the third consecutive quarter, all three server classes (volume, mid-range and high-end) experienced improved year-over-year demand during the 3<sup>rd</sup> quarter. Volume server revenue increased 5% year-over-year while mid-range server revenue increased 4.7% and high-end server revenue increased 1.1%.

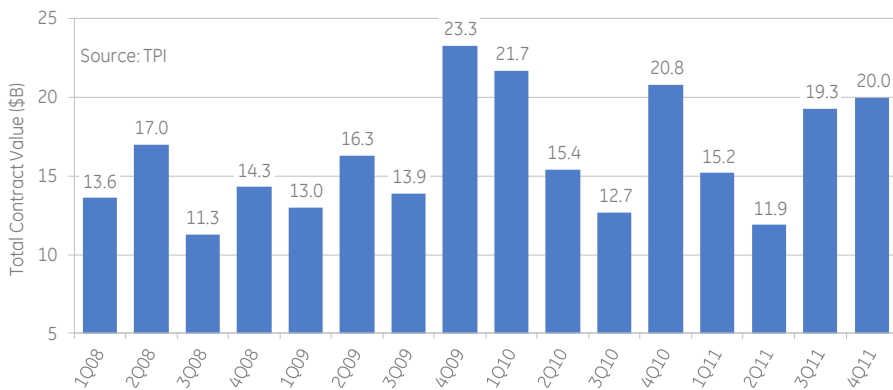
## Software & Services

### U.S. Private Fixed Investment – Software (Annualized % Change)



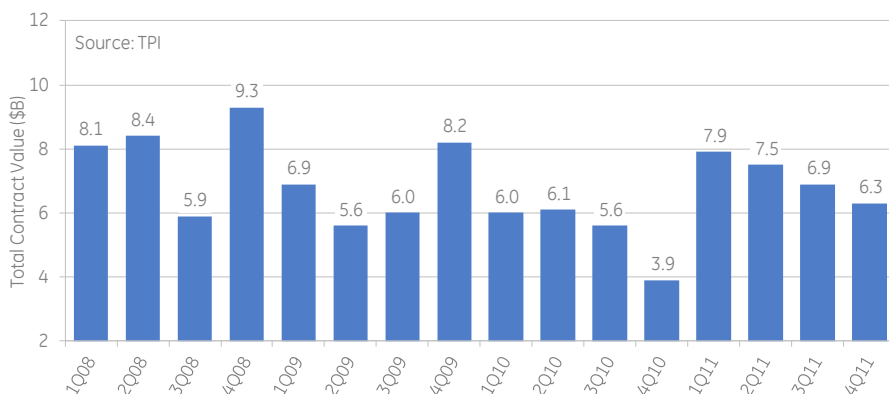
Driven by positive macro trends coupled with investment in new computing models such as cloud, growth in software spending continued to carry positive momentum through the 3<sup>rd</sup> quarter. Driven by typical seasonal spending coupled with favorable year-over-year comparisons, investment in software remained at a robust annualized rate of 5.7% during the 3<sup>rd</sup> quarter.

### Global IT Services Contract Signings (> \$25 million)



New IT outsourcing services contract activity finished 2011 with positive momentum as the value of contract signings increased 4% quarter-over-quarter during the 4<sup>th</sup> quarter. Although four large “mega-deals” accounted for more than 50% of the total value of contract signings, the total number of contracts signed during 2011 increased 8%. Nonetheless, the total value of all contracts signed during the 4<sup>th</sup> quarter and for the entire year declined 4% and 6% year-over-year, respectively.

### Global BPO Contract Signings (> \$25 million)

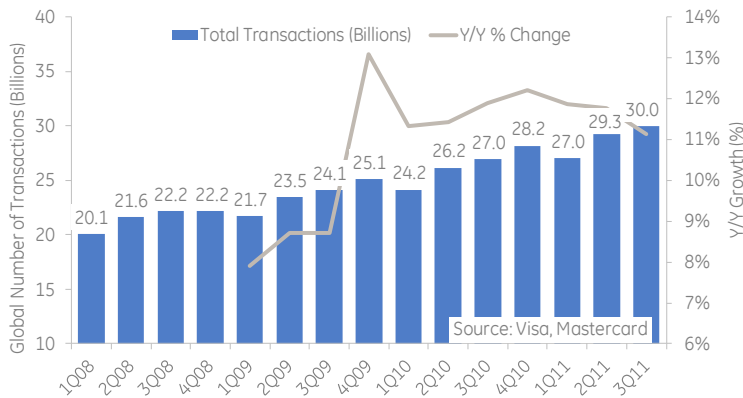


Despite a declining quarterly trend throughout 2011, the total contract value of BPO signings for the year was the second highest total in the past six years. During the 4<sup>th</sup> quarter, the total value of BPO contract signings declined by 9% quarter-over-quarter but rose 60% year-over-year.

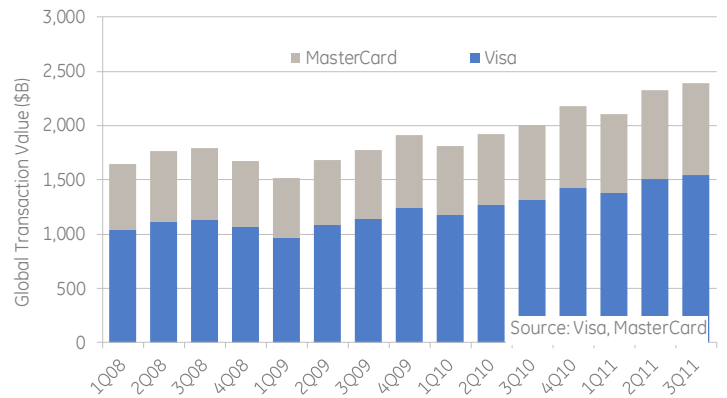
# Financial Transaction Processing

4<sup>th</sup> quarter statistics will be published in the update for February. Despite global macro uncertainties, the positive trend of financial transaction processing volumes continued through the 3<sup>rd</sup> quarter. Visa and MasterCard continue to see strong growth in the number of transactions as well as the gross value of transactions. During 3Q11 combined global credit and debit volume and value of transactions grew 11.1% and 17.7%, respectively.

Global Credit & Debit Transaction Volume



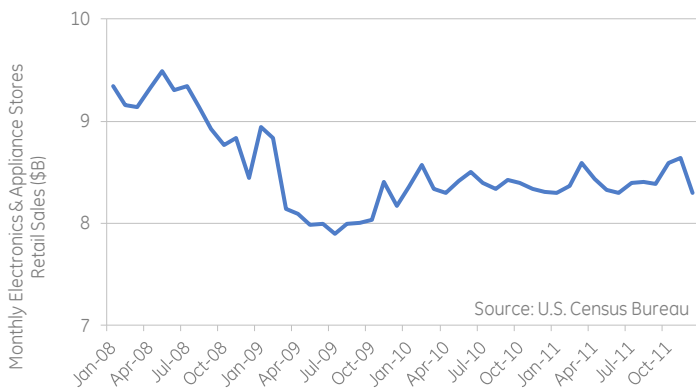
Global Credit & Debit Transaction Value



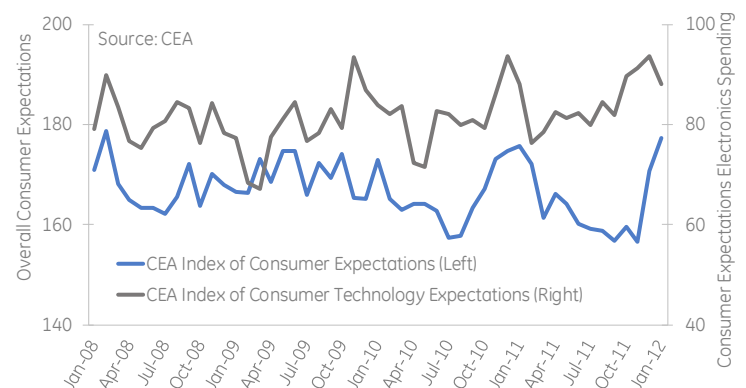
# Consumer Electronics

Consumers were more upbeat about the economic outlook towards the end of 2011 and the start of 2012. The CEA Index of Consumer Expectations (ICE) for January 2012 increased from an all-time low in November by more than 20 points to 177.3. The index is now at its highest level since February 2008 although up less than 2 points year/year. Despite the company's first quarterly sales increase in 6 quarters, Best Buy's 3<sup>rd</sup> quarter earnings fell short of expectations due to aggressive discounting.

Electronics & Appliance Stores (Seasonally Adjusted Sales)

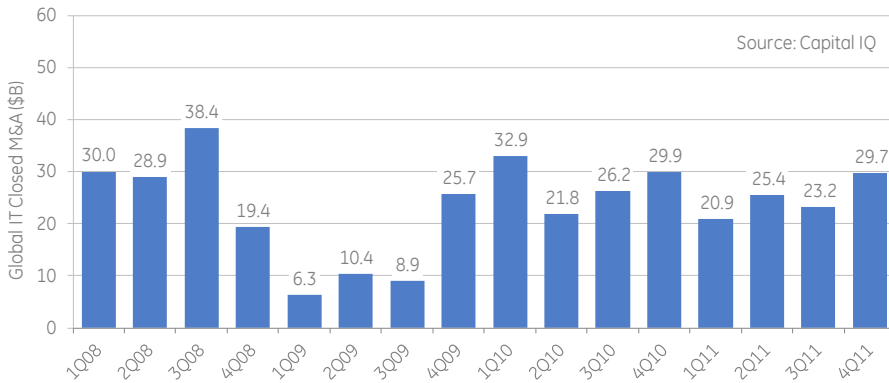


Consumer Confidence & Intentions To Purchase Electronics



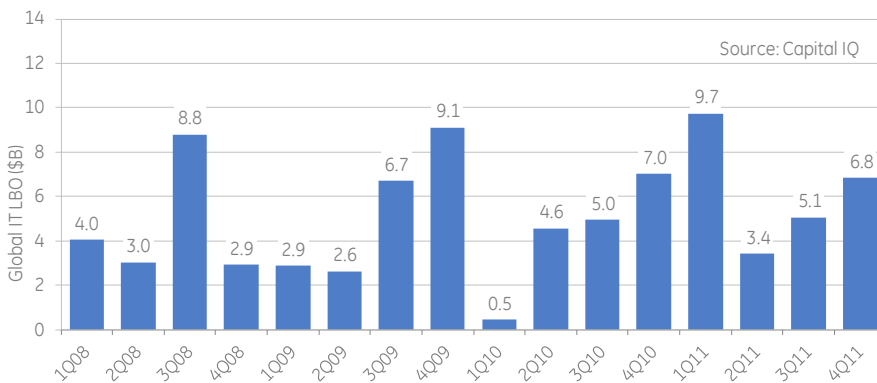
## Corporate Activity

Global Strategic M&A Volume (value of closed transactions)



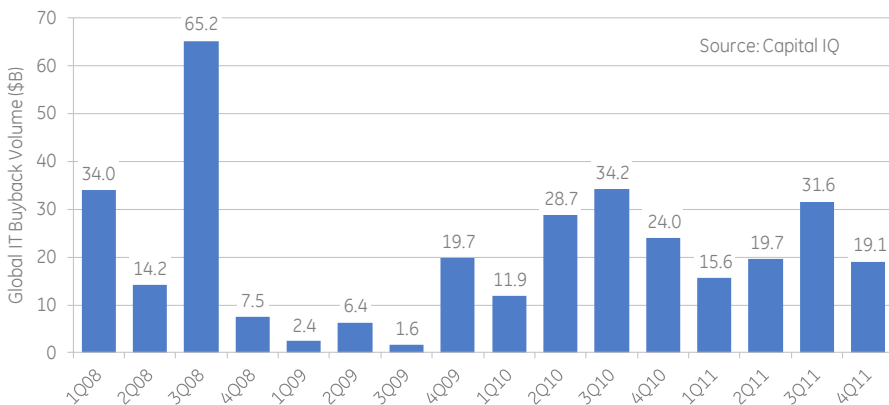
Global M&A activity and associated financing in the technology industry started off slowly in 2011 but rebounded nicely by mid-year despite turbulence in the capital markets. Total M&A volume overall during 2011 declined approximately 10%.

Global LBO Volume (value of closed transactions)



The pace of private equity transaction closings during 2011 followed a typical pattern of acceleration through the end of the year. The value of closed transactions during the fourth quarter saw a pickup from the preceding quarter and was comparable to the year ago quarter. Following an exceptionally strong 1<sup>st</sup> quarter, total LBO volume during 2011 was up 47%.

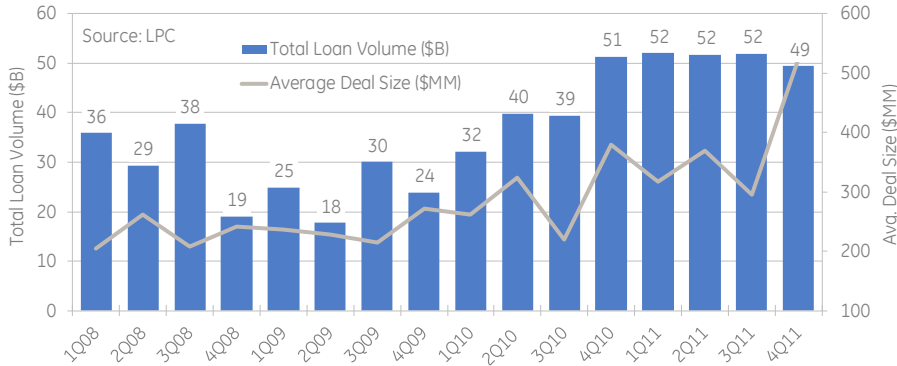
Global Corporate Stock Buyback Volume



As expected, stock buyback volume generally maintained an inverse relationship with the direction of the overall equity market. Buyback activity during the 4<sup>th</sup> quarter experienced a downtick as public equity markets advanced toward the end of the quarter on improving macro economic indicators and retreating fears of sovereign debt issues.

# Financing Trends

## Global Technology & Business Services Leveraged Loan Issuance (\$B)



Despite turbulence in the capital markets early in the quarter, global leveraged loan issuance remained fairly strong during the fourth quarter of 2011. Total leveraged loan issuance during 2011 increased 27%.

GE Capital's Telecom, Media and Technology (TMT) financing business completed 38 deals totaling \$3.4 billion in financing during 2011. Visit: [gecapital.com/tmt](http://gecapital.com/tmt)

## GE Capital Commitments

### \$9 Billion in Investments Across the Value Chain\*

\*GE Capital, Americas as of 9/30/11

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**\$694 Million**  
Semiconductors & Capital Equipment



**\$5.7 Billion**  
Software & Services



**\$966 Million**  
Systems & Storage



**\$1.7 Billion**  
VARs & Distribution

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