

# CIO Survey: Putting a bad year to rest, now looking forward

## CIOs under spending vs. plan; 2010 spend flat to slightly up

Our survey has a respondent base of 21 well-recognized US Fortune 1000 CIOs. While not statistically significant to make any hard conclusions on individual stocks, the survey is useful for its anecdotal value and indications of shifts or validation of vendor perception. IT spending intentions dipped to -8.6% vs. -5.6% from 2Q09. While this could signal a weakening trend, we believe that CIOs are likely under spending relative to plans. 2010 spending intentions seem slightly up vs. 2009 based on our IT Hardware team's survey that has a broader sample of 200+ IT Hardware buyers. Not an-apples-to-apples comparison to our survey but still a fair indication of intentions. Our European CIO survey showed less 2010 optimism vs. our U.S. survey—62% of the European CIOs expect a flat budget vs. 47% in the IT Hardware survey expecting an increase.

## Little statistical evidence, but Q4 budget flush more likely

While ours and the IT Hardware team's surveys do not make a strong case for a year-end budget flush, CIOs in general are reticent to embrace the term 'budget flush'. We view a budget flush likely given (a) CIOs may have under spent YTD (b) good outlook for corporate profitability and c) a strong stock market could sustain business confidence and get spending to the finish line as the yr unwinds.

## Win 7 upgrade plans up a bit; less dependent on PC refresh

With Win 7 launch less than a month away, no surprise in the increase in CIO mindshare this Q. 24% of respondents plan to upgrade in 2010 or 2011 (15% Q2, 5% Q1). In our IT Hardware team's survey, nearly 40% of respondents to a similar question said that majority of their company's existing computers can run Win 7. This lowers the barrier for a potential Win 7 software upgrade cycle.

## Virtualization leads software spend; VMware still the leader

Virtualization spend registered highest growth of all software categories at +3.7% (vs. +4.2% q/q) with VMware at #1 with 81% of CIO spend intentions. However, there is a disconnect between virtualization spend intentions and declining VMware license growth. vSphere adoption may take time as most CIOs have not considered upgrading. Moreover, desktop virtualization uptake still remains tepid.

## OnDemand spend intentions up; Salesforce.com stays ahead

Cost savings and ease-of-implementation have led CIOs to give high priority to OnDemand software at +3.1% (vs. +3.5% q/q). 71% of the CIOs surveyed were considering a SaaS solution (up from 65% q/q). Salesforce.com remained the top pick in this category by CIOs with 43% considering it (up from 40% q/q).

## McAfee & Check Point gain mindshare; Security remains key

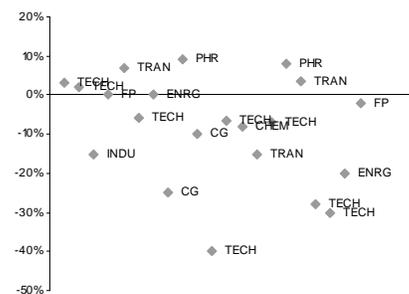
Security spend remains robust at +1.5% (vs. +1.8% q/q) attesting to its importance regardless of the economic cycle and allaying investor concerns. McAfee continued to increase its mindshare (44% vs. 35% q/q) and Check Point surprisingly reversed share loss likely from its Nokia appliance acquisition (44% vs 29% q/q). 95% CIOs planned to maintain or add security spend (like in 2Q09).

## Bank of America Merrill Lynch

<b>Kash Rangan</b> Research Analyst MLPF&S kash.rangan@baml.com	+1 415 676 3540
<b>Scott D. Craig, CFA</b> Research Analyst MLPF&S scott.d.craig@baml.com	+1 646 855 2685
<b>Jaimin Soni</b> Research Analyst MLPF&S jaimin.soni@baml.com	+1 646 855 2569
<b>Ryan Goodman, CFA</b> Research Analyst MLPF&S ryan_goodman@ml.com	+1 415 676 3573
<b>Mitesh Dhruv, CFA</b> Research Analyst MLPF&S mitesh.dhruv@baml.com	+1 415 676 3534
<b>Raimo Lenschow, CFA &gt;&gt;</b> Research Analyst MLPF&S (UK) raimo.lenschow@baml.com	+44 20 7995 9663

Our survey respondent base includes 21 CIO's from major, well recognized U.S. organizations in the Fortune 1000 and across different industries. We also include a number of specific responses from these CIO's.

Chart 1: Expected y/y IT growth in '09



Source: Source: BofA Merrill Lynch Global Research  
Consumer Goods (CG), Technology (TECH), Transportation (TRAN),  
Food Products (FP), Energy (ENRG), Pharma (PHR), Chemicals (CHEM),  
Industrials (INDU)

>> Employed by a non-US affiliate of MLPF&S and is not registered/qualified as a research analyst under the FINRA rules.

Refer to "Other Important Disclosures" for information on certain Merrill Lynch entities that take responsibility for this report in particular jurisdictions.

Merrill Lynch does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision.

Refer to important disclosures on page 26 to 27. Analyst Certification on Page 25.

## CIO Survey- Software spending outlook

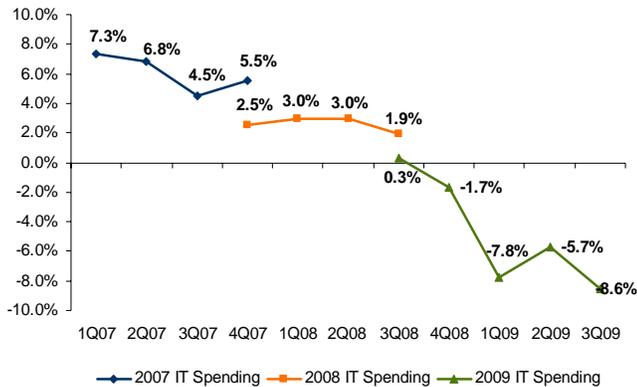
Our survey includes responses from 21 senior IT Executives from large US corporations and includes commentary from respondents where relevant. Each of the companies included in the survey is a large and well recognized business from a variety of industries.

2009 IT spending dipped to lowest level this year in our 3Q CIO survey to -8.6%, reversing the uptick we had seen in 2Q.

**Spending expected to fall to -8.6% down from -5.7% in our prior survey**  
According to respondents to our CIO survey, average IT spending is expected to fall to -8.6% in 2009, from the -5.7% decrease recorded last quarter, registering the lowest level seen this year. In the past two years we have seen IT expectations start on a positive note and get progressively weaker over the course of the year, as seen from chart 2. The fall in spend intentions recorded this quarter will retrace back to that trend after improving in 2Q09. Though the number of CIOs expecting negative IT spend remained roughly the same as the prior quarter (62% vs. 60%), the extent of the negative revisions increased dragging down the overall average.

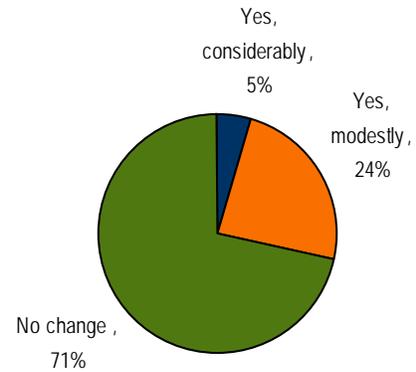
In 2007, the delta from start to finish was -1.8%. While it stayed negative in 2008, the delta narrowed to -0.6%. It appeared that CIOs are able to increasingly bridge the gap between intentions and actual spending. However for 2009, this delta currently stands at 8.9% and may prove difficult to narrow. The current macro conditions have continued to obstruct visibility for CIOs and 57% of CIOs indicated that they will continue to spend the same amount even if the economy stabilizes. Only 14% of the CIOs surveyed indicated intent to revise spending upwards in 2H09 if the economy improves (same as in our 2Q survey). While we anticipate that CIOs are likely to move on to 2010 budgets in the near future and spending intentions for 2009 are less likely to change further, we believe that some potential for upside exists with prospects of an economic recovery in late 2009 or early 2010.

**Chart 2: Spending expectations for the remainder of 2009 dipped to their lowest levels this year at -8.6%**



Source: BofA Merrill Lynch Global Research

**Chart 3: 29% of CIOs felt that economic pressures have subsided, not changing from our last quarter's survey**



Source: BofA Merrill Lynch Global Research

**Table 1: If the economy stabilizes, do you expect upward revisions to your 2009 IT budget?**

	2Q09 Net	3Q09 Net
No, will keep spending the same for 2009	50%	57%
No, will keep spending the same for 2009 but push some spend to 2010	30%	29%
Yes, will revise spending upward in 2H09	15%	14%
Too early to say	5%	0%

Source: BofA Merrill Lynch Global Research

**2009 Q4 budget flush possible, but not yet apparent**

We asked CIOs about the possibility for a budget flush given the likelihood that most companies under-spent budgets in the first three quarters. Of the 11 responses we received, the general consensus was notably conservative with no CIO indicating plans for a Q4 spending catch up. 36% of the respondents indicated that there was no under-spending early in the year. Our sense is that Q4 still stands to benefit from a modest budget flush, but depends on better visibility into a likely measured spending recovery in 2010.

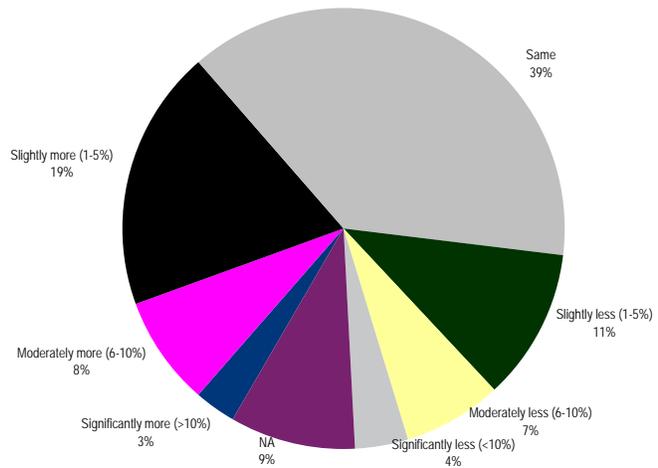
**Table 2: Did you under-spend your budget in the first three quarters? Do you plan to catch up in your 4Q spend?**

	3Q09
Yes, we under-spend in the first three quarter but don't plan to increase our spending in 4Q	64%
No, we are tracking our projected budget	36%

Source: BofA Merrill Lynch Global Research

**Figure 1: 4Q spending expectation (September 2009)**

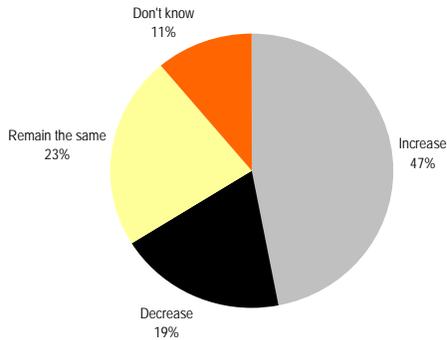
Do you expect your company's 4th quarter IT spending will be more than your company's 3rd quarter IT spending, less than, or will IT spending be the same?



Source: BofA Merrill Lynch Global Research - IT Hardware team survey

**Figure 2: 2010 IT spending intentions**

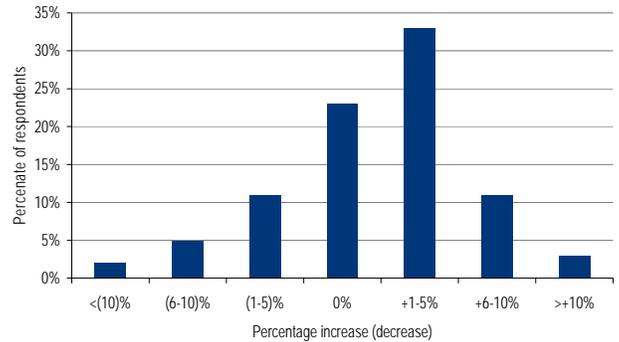
Do you expect your company's 2010 IT spending will be more than your company's 2009 IT spending, less than, or will IT spending be the same?



Source: Source: BofA Merrill Lynch Global Research - IT Hardware team survey

**Chart 4: 2010 IT spending levels**

By what percentage will your 2010 IT spending increase or decrease relative to your 2009 IT spending?



Source: BofA Merrill Lynch Global Research - IT Hardware team survey

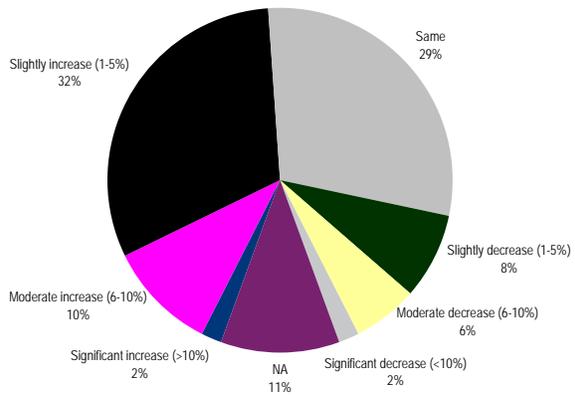
**Marginal expectation of 1H10 spending increase**

Seventy-two percent of respondents in the IT Hardware team's survey anticipate flat/higher spending levels in C1H10 versus muted expectations for C2H09. That said, respondents only expect a 1% increase C1H10 versus 2H09, again likely implying relatively subdued spending levels going forward. See figure 3.

Compared to 2009 spending levels, 36% of IT buyers surveyed in the IT Hardware team's survey anticipate spending more in 2010 on enterprise software (Win 7, databases, virtualization software and systems management), 25% expect to spend more on application software (security, CRM, ERP, business intelligence), 20% expect to spend more on software maintenance, 42% expect to spend more on laptops and desktops, and 28% expect to spend more on servers. These metrics have potential to prove positive for Microsoft, Oracle, VMware, McAfee, Check Point, Sybase and Salesforce.com in 2010.

**Figure 3: 1H spending expectations (September 2009)**

Do you expect your company's 1st half IT (2010) spending will be more than your company's 2nd half IT (2009) spending, less than, or will IT spending be the same?



Source: BofA Merrill Lynch Global Research - IT Hardware team survey

**Enterprise and Application Software top 2010 IT spend intentions**

Our IT Hardware team's survey polled respondents on their 2010 spend intentions across all IT categories and found that Enterprise and Application software tops the list at 24% and 11% respectively.

**Table 3: 2010 spending intentions by category**

	Significantly More	Slightly More	Same	Slightly Less	Significantly Less	Net spending (Current)	Net spending (June 2009)
September							
Enterprise software	2%	34%	32%	9%	3%	<b>24%</b>	<b>-3%</b>
Application software	2%	23%	40%	10%	4%	<b>11%</b>	<b>-10%</b>
Servers	1%	27%	38%	14%	4%	<b>10%</b>	<b>-18%</b>
Software maintenance	0%	20%	50%	10%	3%	<b>7%</b>	<b>-16%</b>
SAN storage	1%	13%	41%	6%	2%	<b>6%</b>	<b>-4%</b>
Laptops	2%	24%	37%	18%	4%	<b>4%</b>	<b>-25%</b>
NAS storage	1%	12%	35%	7%	4%	<b>2%</b>	<b>-5%</b>
Off-shore IT consulting	1%	13%	18%	7%	8%	<b>-1%</b>	<b>-10%</b>
Desktops	2%	14%	38%	19%	10%	<b>-13%</b>	<b>-32%</b>
On-shore IT consulting	0%	6%	35%	12%	9%	<b>-15%</b>	<b>-31%</b>

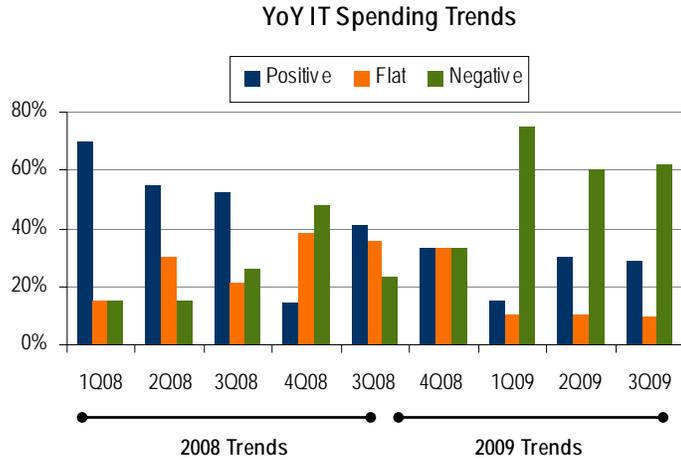
Source: Changewave, BofA Merrill Lynch – IT Hardware Team Survey

**Table 4: Overall comments on IT budget**

Tech	The operational budget last time was listed as Flat. This time, it is down by -10%. He has better data this time.
Industrial Equipment	The operational budget will end down by 8%.
Food Products	Capital budget is down by 4% rather than 10%. "We made some strategic decisions about investments we wanted to make," he said.
Transportation	There has not been any change since Q2. "We're pretty much done with what we're going to do in 2009; we're really concentrating on 2010 now," he said. "The way that we budget and do things financially, when we get to about this point in the year, everything just stays static; we try to hold firm and do most of the planning for next year," he explained.
Energy	He expects next year's budget will be down by 10% across the board.
Pharma	He is in the midst of the business planning process for next year. "We will get much more serious about rationalizing some things," he noted. "Often when you rationalize from a business process perspective, it ends up generating IT spend to get that done," he said. Costs come from other areas of the business. It is unclear at this stage what the answer will be on this. Rationalizing is at the design phase. There is intellectual alignment around the business actions that need to be taken. How those translate into tactics will not happen until the business planning process is completed. This will be in mid-November or even into December.
Consumer Goods	"Almost nothing has changed since last time," he said.
Chemicals	The Capital Budget went from down 10% to down 15%. The Operational Budget went from down 2% to down 5%. His fiscal year begins on September 1. He is answering for his FY 2010 budget. He went through corporate wide restructuring. As a result, he cut travel, contract labor, and hiring.
Transportation	He is under-spending the 2009 budget by pressure from executives. He has cut travel, training, and anything else that "does not keep the store open." "We are tight," he added.
Tech	The operational budget is down by 10%. Last quarter, it was down by 8%. He is trying to keep costs in line with the company's business outlook.
Pharma	The capital budget is up based upon a specific initiative to reduce his overall data center costs. It is a multi-year business case. This is the 1st year. The operational budget is up because of the above referenced project and some business unit growth demand.
Transportation	We are committed to the spend on the plans for 2009 in order to complete the initiatives," she explained. "Obviously in these economic times, we're doing a lot to control and contain costs, but there are some things that we cannot back away from," she added.
Tech	Most of the reduction came in staffing and in software maintenance.
Energy	The company built a new data center last year, so the capital budget is down dramatically over last year.
Food Products	This is the same as last quarter.

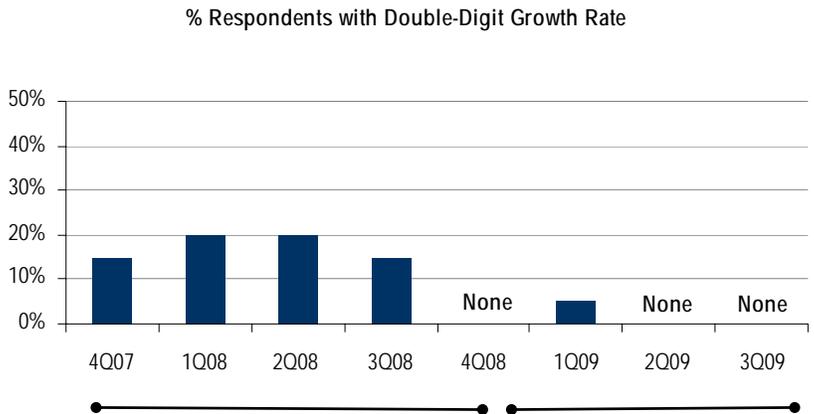
Source: BofA Merrill Lynch Global Research

**Chart 5: We saw a close repeat of IT spending intentions seen in our 2Q09 survey with 62% of respondents seeing a negative trend (vs 60% q/q), and 29% positive (vs. 30% q/q)**



Source: BofA Merrill Lynch Global Research

**Chart 6: As seen in our 2Q09 survey, none of the respondents in 3Q expected a double digit increase in growth rate**



Source: BofA Merrill Lynch Global Research

**VMware maintained its position as top wallet share gainer, followed by SAP and MSFT**

VMW, SAP, MSFT and ORCL continue to be the top wallet share gainers with VMW at 35%, SAP at 25% and MSFT at 20%.

We saw a repeat of our 2Q survey with VMW, SAP and MSFT comprising of the top three wallet share gainers. While VMW continued to be viewed as a share gainer by 35% of CIOs, SAP was down slightly to 25% from 30% in 2Q and MSFT maintained its position as a share gainer by 20% of the CIOs surveyed. The continued dominance of VMW in this category credits the high preference customers are giving to virtualization as an area to help minimize costs in tough economic times. We also note that ORCL was ranked a share gainer by 15% of CIOs (down from 20% in 2Q), while Citrix garnered higher interest at 15% (up from 5% in 2Q).

**Table 5: VMW, SAP and MSFT continue to top wallet share gainers. Customers also indicated interest in ORCL and CTXS products**

Companies	1Q09	2Q09	3Q09
VMware	50%	35%	35%
SAP	30%	30%	25%
Microsoft	30%	20%	20%
Oracle	25%	20%	15%
Citrix	10%	5%	15%
Symantec	15%	10%	10%
BMC	0%	5%	5%
CA	0%	0%	0%
McAfee	5%	0%	0%
Checkpoint	5%	0%	0%
Autodesk	0%	0%	0%
Adobe	0%	0%	0%

Source: BofA Merrill Lynch Global Research

CIOs continued to anticipate that 14% of 2009 IT spending will be allocated to software purchases. We expect this proportion to remain fairly stable as we near the end of 2009. IT budget shares of other categories like HW purchases (13%), IT Consulting (7%), IT/BPO Outsourcing (12%), Networking (12%) and Internal Staff (41%) remained fairly constant and in line with our 2Q survey. We also note that CIOs indicated software purchases were less likely to face more cuts, even if the economy and businesses underperform going forward, potentially indicating that spend in this category is already at the bare minimum required.

**Table 6: During 2009, what % of your IT expense budget will be spent on the following:**

IT Spending	1Q07	2Q07	3Q07	2008	1Q08	2Q08	3Q08	2009	1Q09	2Q09	3Q09
HW Purchases	12%	14%	12%	18%	14%	13%	13%	13%	11%	13%	13%
SW Purchases	13%	15%	14%	18%	14%	15%	15%	13%	15%	14%	14%
IT Consulting & Sl.	11%	13%	12%	13%	11%	10%	12%	8%	8%	7%	7%
IT/ BPO Outsource	19%	17%	19%	11%	14%	13%	16%	14%	12%	12%	12%
Internal IT Staff	34%	31%	31%	29%	35%	38%	35%	40%	40%	42%	41%
Networking	11%	10%	11%	11%	11%	12%	10%	12%	13%	12%	12%
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: BofA Merrill Lynch Global Research

**Table 7: As economy and businesses slow and IT budgets come down, please list which IT spending categories would be the first to be cut. Rank 1-6 with 1 being the most likely to be cut**

	1Q08	2Q08	3Q08	2009	1Q09	2Q09	3Q09
IT Consulting & Systems Integration (strategic)	1	1	1	1	1	1	1
Outsourced IT Services & Business Process Outsourcing	4	4	4	2	2	3	2
Software purchases	2	2	2	2	3	2	3
Hardware purchases	3	3	3	4	4	4	4
Internal IT staff	5	6	6	5	6	5	5
Networking	6	5	5	6	5	6	6

Source: BofA Merrill Lynch Global Research

## Spending intentions for software

### Virtualization, OnDemand/SaaS and Security stay the most resilient areas of software spend

We saw few changes in our 3Q survey regarding CIO intentions for allocating their budgets. Higher ticket items like enterprise applications registered a higher propensity to get deferred along with non-essential software upgrades like Microsoft XP/Vista and Office. While overall software spend intentions were down, areas like Virtualization, OnDemand apps and Security software which offer cost savings and are compliance requirements continued to get higher priority. OnDemand/SaaS and virtualization software allow companies to move to a lower expense diet as they struggle to do more with fewer resources. Additionally, Security software is an operational and regulatory necessity for corporations in the current high threat environment. Among these three areas, Virtualization remained top priority at +3.7%, down slightly from +4.2% in 2Q, but a strong number given overall spending intentions decline of -8.6%. OnDemand/SaaS spend reflected CIO interest in the low cost subscription model at +3.1% (vs. 3.8% in 2Q) and Security software was prioritized at +1.5% (vs. 1.8% in 2Q).

Spending expectations for Microsoft's XP/Vista and Office remained at par with the decline we saw in 2Q. This is not surprising as CIOs are likely to defer expenses in these as they await the approaching Win 7 (Oct 22<sup>nd</sup>) and Office 2010 (January, 2010) release. We intend to watch this indicator closely to gauge customer demand over the next couple of quarters.

**Table 8: If you had to defer spending on Software due to a slowing economy, how do you prioritize spending in the following areas?**

	Up	Flat	Down	% Change 1Q09	% Change 2Q09	% Change 3Q09
Virtualization (VMware, etc.)	45%	25%	30%	2.1%	4.2%	3.7%
OnDemand/SaaS apps (CRM, ERP, HR, Web Conferencing, T&E)	26%	53%	21%	1.3%	3.8%	3.1%
Security	24%	62%	14%	0.9%	1.8%	1.5%
Linux and Open Source (RedHat, Novell)	35%	40%	25%	-0.4%	1.2%	0.8%
Databases	10%	60%	30%	-1.4%	-0.8%	-1.1%
Middleware	5%	67%	29%	-1.5%	-1.6%	-1.8%
Systems Management (CA, BMC, HP)	11%	58%	32%	-5.1%	-3.0%	-3.4%
Enterprise Applications (Oracle, SAP, etc.)	5%	55%	40%	-4.2%	-5.6%	-6.4%
Windows XP/Vista	0%	57%	43%	-4.3%	-11.6%	-11.5%
Microsoft Office	5%	52%	43%	-5.8%	-13.9%	-13.5%

Source: BofA Merrill Lynch Global Research

**Table 9: Comments on companies and software spending priorities**

Tech	As he rationalizes applications, he will need less and less number of databases.
Transportation	Databases are not applicable, because she outsources to IBM.

Source: BofA Merrill Lynch Global Research

## Microsoft/Windows 7 & Office 2010

### Intentions to upgrade to Win 7 in 2010 propping up

48% of CIOs surveyed stated that they were evaluating Win 7, while 10% reported intentions of upgrading in 2010 and 14% intend to upgrade in 2011. 14% CIOs surveyed intend to upgrade to Office 2010 in 2011.

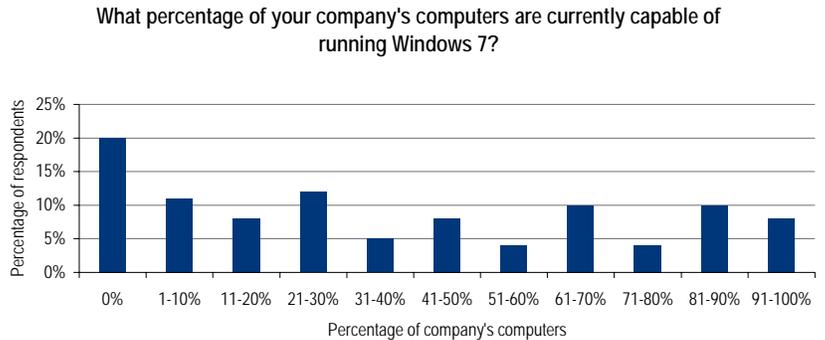
With the pending release of Win 7 in October, we expect a potential upgrade is likely to come up on CIO radars. When asked regarding their upgrade intentions, 10% of the CIOs surveyed stated intentions to upgrade in 2010 while 14% showed interest to upgrade in 2011. This was higher than the 0% upgrade intentions in 2010 from our 2Q survey and at par with 15% intending to upgrade in 2011. However, only 48% of CIOs were evaluating the OS, down from 60% in 2Q, but this could be as some of the CIOs have completed their evaluations. 29% of the CIOs reported that they were not evaluating Win 7 yet. We believe this could be as some customers choose to wait for a couple of quarters after a major product release before initiating an upgrade cycle. We will continue to monitor this metric closely as Win 7 is set to launch at the end of October. Please see our report "[More levers than prior cycle](#)" for our detailed analysis on the impact of Win 7.

Table 10: What is your early assessment of Windows 7?

	1Q09	2Q09	3Q09
Intend to upgrade in 2010	5%	0%	10%
Intend to upgrade in 2011	0%	15%	14%
Evaluating, no intentions of upgrading yet	63%	60%	48%
Not Evaluating	32%	25%	29%
	100%	100%	100%

Source: BofA Merrill Lynch Global Research

Figure 4: Percentage of computers able to run Windows 7?



Source: ChangeWave, BofA Merrill Lynch

**Table 11: Comments about Windows 7**

<b>Food Products</b>	He is still evaluating it; he plans to start upgrading in 2010.
<b>Energy</b>	Right now, he is standardized on XP, even though support has gone away. The corporate policy is to wait until at least the first service pack comes out for Windows 7 before the company starts to do anything with it.
<b>Pharma</b>	He just had dinner with Microsoft last night. It was extolling the virtues of Windows and talking about how bad Vista was. "The people I've talked to are very happy with Windows 7," he said. "It clearly addresses some of the issues with Vista," he added. Most people did not go to Vista. "Unless you had a specific 64-bit application, Vista was a bit of a nightmare," he said. Gamers loved it.
<b>Consumer Goods</b>	He uses a lot of Windows XP.
<b>Transportation</b>	He is having a successful evaluation of Windows 7. The problems that have occurred are reasonable, and he has been able to overcome them. The strategy for all the Windows products is to acquire the new operating system with new PCs. He is on a 4 year cycle for PC refresh. In 2010, he will start to bring in Windows 7 in the 3rd or 4th quarter. The company will run both Windows 7 and XP simultaneously.
<b>Tech</b>	He will not consider this until it is more established.
<b>Pharma</b>	He may upgrade in 2011, but this is not definite.
<b>Tech</b>	He may upgrade in 2010, but he will definitely upgrade by 2011.

Source: BofA Merrill Lynch Global Research

In addition, about 38% of the CIOs in our survey are evaluating Office 2010, in-line with 40% in 2Q. Again, as with Windows 7, it will be key to monitor this trend in the next couple of quarters leading up to the GA.

**Table 12: What is your early assessment of Office 2010?**

	1Q09	2Q09	3Q09
Intend to upgrade in 2010	0%	0%	0%
Intend to upgrade in 2011	0%	10%	14%
Evaluating, no intentions of upgrading yet	32%	40%	38%
Not Evaluating	68%	50%	48%
	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: BofA Merrill Lynch Global Research

We also asked CIOs if they had any plans to start leveraging Microsoft's Azure platform for Cloud computing based services. However in line with our 2Q survey, CIOs unanimously stated that it was too early to tell if Azure offers a platform they would like to leverage. We intend to monitor this metric closely to see when CIO interest about Azure picks up, as an indicator of uptake of Cloud computing.

**Table 13: Transfer some internal Microsoft computing workloads to Azure?**

	2Q09	3Q09
Yes, I can save costs with Azure	0%	0%
No, I cant save costs with Azure	0%	0%
Too early to say	100%	100%

Source: BofA Merrill Lynch Global Research

Survey respondents remained unanimous in stating that it was too early to gauge if MSFT's Azure platform offered any cost benefits, in line with our 2Q survey.

CIOs continued to negotiate more on prices with vendors like ORCL, MSFT, SAP, VMW and were seeing higher success rates.

## Maintenance contracts and ELAs

### CIOs recorded a higher success rate in maintenance price negotiations

Maintenance fees represent a key source of revenue for software companies and have historically proven more reliable than license fees. However with current economic conditions, customers have increasingly sought to renegotiate contracts lower which may have an adverse effect on revs previously considered sacrosanct. Our 3Q survey indicated that CIOs had kept up if not increased their efforts to negotiate more attractive pricing on maintenance contracts and were registering a higher rate of success. 67% of CIOs reported that they had increased negotiation efforts with MSFT, down a smidge from 70% in 2Q. However CIOs had increased efforts with Oracle (75% vs. 68% in 2Q), SAP (53% vs. 47% in 2Q) and VMware (47% vs. 32% in 2Q).

While software providers are likely willing to offer incentives like lower license fees or retire seats of unused software (especially in the case of head count reductions at customers), reduction in maintenance fees could pressure their recurring revenue streams. We saw CIOs having more success with their negotiations as 40% were successful with MSFT, 45% with ORCL and 30% with SAP (up from 35%, 40% and 20% respectively vs 2Q). This would imply that software providers have had to be more flexible on price in order to renew and maintain customer base.

Table 14: Are you trying to negotiate lower prices on maintenance/enterprise contracts with software providers (Microsoft, SAP, Oracle, VMware, etc.) in 2009?

Trying to negotiate lower prices and success ratios	1Q09	Success	2Q09	Success	3Q09	Success
Yes, trying to negotiate lower maintenance prices with Oracle	70%	25%	68%	40%	75%	45%
Yes, trying to negotiate lower maintenance prices with Microsoft	65%	20%	70%	35%	67%	40%
Yes, trying to negotiate lower maintenance prices with SAP	50%	25%	47%	20%	53%	30%
Yes, trying to negotiate lower maintenance prices with VMWare	50%	10%	32%	25%	47%	20%
Yes, trying to negotiate lower maintenance prices with some combination of the three providers	90%		85%		81%	
Not trying to negotiate lower maintenance prices	10%		15%		19%	
Tried to negotiate lower maintenance prices but not successful						

Source: BofA Merrill Lynch Global Research

**Table 15: Comments on negotiating lower prices on maintenance contracts**

Tech	The 2 big ones were Microsoft and Oracle. He was successful in that the per unit prices are lower, but the total spend is not lower. SAP and VMware were not up for renewal this year.
Industrial Equipment	Microsoft is in place for another year. His Oracle contract is good for another couple of years. He is not sure what is in place with VMware. He made a big purchase; he pays a fee for maintenance. He is not sure of the type of agreement.
Food Products	Microsoft is in process. He has had success with Oracle and VMware. SAP is not applicable.
Transportation	He does not yet know the outcome for Oracle, but he expects to be successful.
Energy	He is always trying to get a better price. He is doing more with Microsoft. He migrated to Outlook Exchange and is using more SharePoint. He is putting in Office 2007. He has started looking at some of its unified communications offerings as well. The more he does with Microsoft, the better deal he can negotiate. He renewed his ELA with Oracle and got a good deal. SAP is not applicable. "We've bought everything we're going to buy from them; we're not buying anything any more," he commented.
Pharma	"Are these vendors willing to negotiate much more than they may have been a year and a half or two years ago?" he asked. "Absolutely," he answered. He bought more, but he got much more favorable terms.
Consumer Goods	Oracle and VMware were successful in terms of extending terms, but not in achieving lower prices. He negotiated with Microsoft in December 2008 and was successful.
Consumer Goods	Negotiations with Microsoft are in process.
Chemicals	He is renegotiating all of these contracts. He has been successful on Microsoft and SAP. He is still working on Oracle and VMware.
Tech	He is trying to renegotiate prices, but this is in process now.
Pharma	He negotiated last year with Microsoft, Oracle, and SAP, so he does not expect to go back to any of those. He had to include other things that had not been included before, so unit costs were improved, although he paid more than he had in the past.
Tech	He was successful with SAP.

Source: BofA Merrill Lynch Global Research

**ELA renewals rebound to levels seen historically**

We were encouraged to see ELA renewals for companies like ORCL, VMW and MSFT tick up from the declines seen in previous quarter. We believe that companies such as Oracle with deep software stacks continue to be in a better position to navigate through recessionary times. VMware is likely benefiting from its technology lead and customer mindshare over Microsoft, as well as the continued ramp of virtualization in an increasingly cost sensitive addressable market. While tightening IT budgets appeared to have caused ELA renewal intentions to decline in 2Q, they rebounded strongly this quarter. 73% of the CIOs surveyed indicated they had intentions to renew MSFT (vs. 69% q/q), 100% will be renewing ORCL (vs. 91% q/q) and 100% will renew VMware (vs. 75% q/q).

**Table 16: What do you think about new software enterprise license agreements (ELAs) with Microsoft, Oracle and VMware that could be coming up for renewal?**

	1Q09	2Q09	3Q09
Will be renewing Microsoft	80%	69%	73%
Will be renewing Oracle	100%	91%	100%
Will be renewing VMWare	80%	75%	100%

Source: BofA Merrill Lynch Global Research

ELA renewals regained the levels seen historically after dropping slightly in our 2Q survey, with 100% CIOs intending to renew ORCL ELAs, 73% MSFT and 100% VMW.

Table 17: Comments on renewals of software ELAs

Tech	Oracle is coming up for renewal in 2010. He expects to renew at a lower value. He will look at the following: What was deployed? Is he getting value? What is the maintenance stream associated with it? In the case of Microsoft, he kept the ELA the same in terms of entitlements, but at a lower cost.
Tech	"How does one define lower value?" he asked. In both cases, his total spend is flat to marginally higher, but his units are up, so the overall cost is down.
Tech	She currently does not have an ELA with Microsoft. She has had issues with trying to renegotiate an ELA with VMware. She does not have one currently.
Food Products	Microsoft is in progress and will hopefully will be at a lower value. Oracle and VMware do not apply.
Chemicals	All renewals are financially driven.
Consumer Goods	He will probably not renew with Microsoft. He may look into an ELA with VMware in the coming year.
Tech	"From a numbers perspective, we are large enough so that an ELA makes sense," he commented.
Tech	He did not renew the Microsoft ELA, because he had not need for the software.
Pharma	He expects to get lower cost unit pricing from VMware by 20 to 30%.
Energy	She will renew, but not at a lower value. She will renew VMware next year.

Source: BofA Merrill Lynch Global Research

## Database/Oracle

### Database spending expectations moderately improved

While CIOs continued to have a cautious outlook towards database spend (as seen from metrics published above), we also saw a slight pickup in spend intentions relative to 2Q. 39% of CIOs registered intent to reduce DB expenses relative to 42% in 2Q, while 29% had expectations of increasing spend vs. 21% in 2Q. The portion of CIOs keeping their database spend flat continued the downward trend to 33% from 37% in 2Q and 40% in 1Q. From the CIOs anticipating declines in database spend, 10% (vs 5% in 2Q) expected licenses to drop 5-10% while 29% expected licenses to drop 0-5% (vs 37% in 2Q). Having said that, 24% had plans to increase database spend by 0-5% (relative to 21% in 2Q) and 5% had plans to increase spend by more than 10% (vs. none in 2Q).

Table 18: Spending on Database software licenses in the next 12 months?

	1Q09	2Q09	3Q09
Below -10%	5%	0%	0%
-10% to -5%	10%	5%	10%
-5% to 0%	10%	37%	29%
0%	40%	37%	33%
0% to 5%	25%	21%	24%
5% to 10%	5%	0%	0%
More than 10%	5%	0%	5%

Source: BofA Merrill Lynch Global Research

### ORCL and MSFT remain mindshare leaders for database purchases

Our survey indicates that Microsoft and Oracle remain the key companies customers look at for their database purchases. A majority 90% (vs. 95% in 2Q) of the CIOs ranked Oracle as their #1 or #2 priority for database spending in 2009, while 76% (vs. 65% in 2Q) of the CIOs ranked Microsoft as their #1 or #2 priority.

29% of the CIOs surveyed expect an increase in database software spend, up from 21% in 2Q

**Table 19: Please rank the priority of purchases from 1-6 for the following database vendors**

	2Q09	3Q09
Oracle	95%	90%
Microsoft	65%	76%
IBM	20%	19%
mySQL (Sun)	10%	5%
Sybase	0%	0%

Source: BofA Merrill Lynch Global Research

**Table 20: Comments on choice of database vendor**

Tech	He will not purchase more software from any of these vendors over the next 12 months.
Food Products	He is not buying more from anyone.
Chemicals	Oracle and Microsoft spending is down by 5%, because he is renegotiating the contract on existing licenses. The number of licenses is flat.
Consumer Goods	Databases will be down by 10%.
Tech	He is not buying any more software.
Transportation	Same as last time.
Tech	He is buying less IBM because of the move to SAP.
Tech	He is not buying any database software in the next 12 months. His consumption of database software is entirely on maintenance support at this time. He has no need for incremental licenses.

Source: BofA Merrill Lynch Global Research

None of the CIOs see the Oracle-Sun deal as favorable; two-thirds do not expect any material impact.

## Oracle acquisition of Sun

### CIOs still on the fence regarding impact from Oracle-Sun deal

Almost five months after Oracle's announcement to acquire Sun, CIOs continued to remain mostly indifferent to this merger. Though the deal has yet to clear EU regulators and has not closed, we repeated our question to CIOs asked last quarter about the impact that they expected on their hardware and database purchasing patterns from this acquisition. The response we got was similar to what CIOs reported in our 2Q survey. While none of the CIOs surveyed view any positive changes from the merger, 70% did not expect any change at all. As this acquisition gets closer to its anticipated closure, we expect CIOs will get more familiar with any changes that may potentially occur in terms of their database and HW purchasing decisions.

**Table 21: Given the pending acquisition by Oracle of Sun, what kind of change do you expect for your Sun hardware purchases?**

	2Q09 Net	3Q09 Net
Favorable view of the deal	0%	0%
Not favorable view of the deal	21%	20%
No view – No change in Sun spending	63%	70%
Not sure, too early to tell	16%	10%

Source: BofA Merrill Lynch Global Research

Additionally when we asked CIOs if they would pay more for an integrated solution from Oracle that includes Sun's hardware, 24% (down from 31% in 2Q) declared no intentions to do so, and 65% (flat q/q) indicated no change to their pricing sensitivity. However, the number of CIOs willing to pay more for such a combined solution doubled from 6% in 2Q to 12% which might indicate that customers are becoming more receptive. We maintain that Oracle's pending acquisition of Sun makes strategic and financial sense for the company. Though

integration risks exist, the control of Solaris OS and Java enables Oracle to provide a fine-tuned appliance for running databases, app servers and apps. Having said that, our CIO survey indicates that Oracle might need to do more to overcome customer inertia against the combined platform to make this acquisition successful.

**Table 22: If Oracle bundles the SUN's HW with its DB/App server, will you be willing to pay more for combined HW appliance vs. separate?**

	2Q09 Net	3Q09 Net
Yes, willing to pay more	6%	12%
No, willing to pay less	31%	24%
No change to hardware price sensitivity	63%	64%

Source: BofA Merrill Lynch Global Research

SAP came in first with the most #1 and #2 prioritizations for 2009 apps spending at 57%; ahead of Oracle which maintained at 48%.

## SAP and ORCL in Apps

### SAP and Oracle maintain leadership in software app purchases

The application software landscape in terms of CIO spending intentions registered little change as SAP and ORCL maintained their leadership. SAP reported 57% share with CIOs (vs. 60% last q) and ORCL had 48% share (vs. 50% in 2Q). Other application providers like SuccessFactors, Salesforce.com and Concur reported roughly the same share seen in 2Q (19%, 14% and 5%).

**Table 23: Which of the following Applications Providers do you expect to purchase more software from in the next 12 months?**

	1Q09	2Q09	3Q09
SAP	40%	60%	57%
Oracle (Siebel, PeopleSoft, JD Edwards, Hyperion)	50%	50%	48%
SuccessFactors	15%	20%	19%
Salesforce.com	20%	15%	14%
Concur	15%	5%	5%
Microsoft Business Solutions (Dynamics)	5%	0%	0%
Taleo	0%	0%	0%

Source: BofA Merrill Lynch Global Research

**Table 24: Comments on choice of application provider**

<b>Industrial Equipment</b>	He has some SAP through acquisitions.
<b>Tech</b>	She will purchase a little bit more Siebel from Oracle.
<b>Pharma</b>	He is talking to Salesforce.com now; he is unsure how that will come out. SAP and Oracle have equivalent priority. He is a big SAP global user; he runs most of his manufacturing, except for shop floor, and all HR and financials on SAP. He does Siebel on all his customer facing applications.
<b>Consumer Goods</b>	He uses home grown applications software.
<b>Consumer Goods</b>	He is not buying any software in the next 12 months.
<b>Chemicals</b>	There is the potential for a new Salesforce.com install.
<b>Transportation</b>	Oracle for Siebel and PeopleSoft.
<b>Transportation</b>	She will eventually replace Concur with SAP

Source :BofA Merrill Lynch Global Research

19% of the CIOs favor OnPremise software vs. OnDemand, down from 25% in our prior survey.

## OnDemand/SaaS

### OnPremise vs. OnDemand - another take at the seesaw

OnDemand software has slowly but steadily commanded CIO mindshare as economic pressures have forced customers to look at more cost effective options to the traditional OnPremise solutions. When asked if they are favoring OnDemand subscription models to OnPremise licenses, 24% of CIOs (as seen in 2Q) reported they're cutting back on OnPremise while 57% reported no changes yet. We also note that OnPremise software still has appeal and though down from 25% in 2Q, 19% CIOs surveyed responded that they prefer it over the OnDemand model. While OnPremise remains the traditional software delivery model, we would not be surprised to see the scale tip in favor of OnDemand in light of the current economic conditions. As such, if CIO's are able to get the same or better level of service and functionality from OnDemand software and at a better price point, we believe they are highly unlikely to switch back to OnPremise.

**Table 25: How are economic pressures causing you to re-prioritize spending on perpetual license On Premise software versus subscription agreement for On Demand software?**

	1Q09	2Q09	3Q09
Favor perpetual license OnPremise software (Oracle, SAP, Microsoft, etc.) over OnDemand subscription (Salesforce.com, Netsuite, Concur, Successfactors, Taleo, etc.)	10%	25%	19%
Cutting back on perpetual license OnPremise software and spending more on OnDemand subscription	10%	25%	24%
No change in relative allocation	80%	50%	57%

Source: BofA Merrill Lynch Global Research

### CIOs considering SaaS solutions increased to 71%; CRM maintains lead

In line with the response to our prior question, 71% of the CIOs surveyed responded that they are considering OnDemand solutions (up from 65% in 2Q and 35% in 1Q). This was the highest level recorded in our surveys thus far which is a testament to the growing acceptance of SaaS with customers. In tandem with this metric, we also note that number of CIOs considering traditional licenses from ERP vendors continued declining to 29% from 35% in 2Q and 45% in 1Q.

Salesforce.com remained the leader in OnDemand solutions being considered by CIOs at 43% staying comfortably ahead of SAP at 24% and Oracle (Siebel) at 19%. The number of CIOs preferring internally built custom applications remained low at 10%.

**Table 26: Are you actively considering software as an OnDemand (SaaS) service?**

	1Q08	2Q08	3Q08	4Q08	1Q09	2Q09	3Q09
<b>Considering OnDemand</b>	<b>41%</b>	<b>42%</b>	<b>44%</b>	<b>30%</b>	<b>35%</b>	<b>65%</b>	<b>71%</b>
Yes, considering Salesforce.com	24%	26%	39%	14%	25%	40%	43%
Yes, considering SAP OnDemand CRM	6%	0%	0%	0%	10%	25%	24%
Yes, Considering Oracle (Siebel)	6%	11%	0%	10%	10%	15%	19%
Yes, Considering SAP AIS (Business by Design)	6%	5%	6%	0%	0%	10%	10%
Yes, considering RightNow				0%	0%	5%	5%
Yes, considering Microsoft OnDemand CRM				0%	5%	10%	10%
<b>No, considering traditional license from ERP vendors (e.g. SAP, Oracle)</b>	<b>29%</b>	<b>42%</b>	<b>39%</b>	<b>33%</b>	<b>45%</b>	<b>35%</b>	<b>29%</b>
No, considering custom/internal build	0%	11%	11%	5%	0%	10%	10%
Not Applicable / Unsure	29%	5%	6%	19%	20%	0%	0%

Source: BofA Merrill Lynch Global Research

**Table 27: Comments on OnDemand (SaaS)**

Tech	He has deployed Salesforce.com.
Tech	He has implemented Salesforce.com to some minor degree.
Industrial Equipment	He uses Oracle On Demand. He has several hundred licenses. It is part of his strategic relationship with Oracle. He does a lot with Oracle, so the linkages and integration that it provides is important.
Consumer Goods	He is considering RightNow for the call center. It is comparable to on premise choices, but SaaS is quicker to market. He is also looking at SAP for the call center, some Oracle, and something home grown. It goes back and forth. He does not have to make a decision until the end of the year.
Chemicals	Salesforce.com is the only product he is considering. This is because of its best-of-class practice and cost model
Tech	He already has Salesforce.com and Siebel OnDemand. SAP OnDemand is under consideration.
Pharma	He may increase use of SaaS over the next 2 to 3 years.
Tech	He is considering Microsoft OnDemand for Exchange and SharePoint. SAP OnDemand is not appropriate for a business of his size. He is interested in managed services offerings.

Source: BofA Merrill Lynch Global Research

vSphere adoption may take time as most of the CIOs have not considered upgrading from the earlier version.

## VMware/Virtualization

### 3Q survey results mirror 2Q09 results; VMW remains the leader

Results from our survey this quarter were mostly in-line with what CIOs reported last quarter. VMware remained the undisputed leader when CIOs considered virtualization products and registered 81% mindshare relative 80% in 2Q. Other participants in the virtualization market like Microsoft, Red Hat, Sun and Citrix recorded single-digit shares from CIOs (9%, 6%, 2% and 1% respectively) which was mostly flat to the interest recorded in 2Q. While MSFT and CTXS probably have a fair offering for less-demanding SME customers with an edge over VMW in pricing, we believe they have their work cut out for them in terms of convincing enterprise customers to use their Hyper-V or XenServer vs. VMW's technically superior product suite. We believe that VMware is likely to continue its lead here, especially with its new vSphere suite, but adoption may take time as most of the CIOs have not considered upgrading from the earlier version. Moreover, uptake of desktop virtualization still remains very tepid.

**Table 28: What percentage of your virtualization software spending would go towards the following vendors?**

	3Q08	4Q08	1Q09	2Q09	3Q09
VMware	83%	85%	78%	80%	81%
Microsoft	6%	7%	5%	9%	9%
Red Hat	2%	6%	6%	7%	6%
Sun (Solaris)	2%	2%	6%	2%	2%
XenSource (Citrix)	1%	0%	5%	1%	1%
Other	5%	0%	1%	1%	1%
Virtual Iron	0%	0%	0%	0%	0%
Swsoft	0%	0%	0%	0%	0%

Source: BofA Merrill Lynch Global Research

**Table 29: Comments on vendor choice for virtualization**

Tech	He would not freeze VMware spending for Hyper-V. He does not think that Microsoft can overtake VMware eventually. He is considering vSphere. He is at VMware 3.3 or so. vSphere is 4.0. He is definitely considering it, primarily because it has much broader capabilities. It will allow him to expand virtualizing his data center. He hopes to be able to virtualize not only the op tier but also the database tier with vSphere.
Food Products Transportation	He has not yet considered vSphere from VMware. He is not looking at vSphere right now, although he has heard of it. He may look at it next year.
Tech	She is considering vSphere. "Considering it and what we actually end up with are probably 2 different things," she noted. There is a lot of cloud at her company.
Pharma	He is not familiar with vSphere. Most of the work the company has done with cloud computing is with Amazon.
Tech	He has implemented vSphere. Cloud computing is a big thing; there is a lot of hype around it. It is really taking the virtualization aspects to the next level and also moving to more effective provisioning and self service, which should translate to improved agility in terms of cycle times and increased virtualization with production and hardware and related costs, such as power cooling, etc. It is definitely a disruptive technology, meaning that it gets IT organizations to act and think differently. He recently purchased Cisco's new UCS platform, which is a key enabler to the whole cloud-computing paradigm.
Tech	He is not considering it at this time. "There is nothing compelling in there for us to adopt it; we are a little further off in getting one of the solutions he wants," he said.

Source: BofA Merrill Lynch Global Research

90% CIOs expect at least a 0-20% growth in virtualization spend, at par with results from our 2Q survey.

About 90% of the CIOs expect at least a 0-20% growth in virtualization, at par with 90% seen in our 2Q09 survey. 10% of the CIOs expect the growth to be north of 20% (in line with 2Q09) despite IT spending pressure, attesting to the resiliency of virtualization. Desktop virtualization, however, has a ways to go as only 10% of the CIOs expect to deploy desktop virtualization in production environments, down from 15% measured in 2Q survey.

**Table 30: Majority of the CIOs continue to expect a meaningful growth in virtualization spend in the next 12 months**

	4Q08	1Q09	2Q09	3Q09
0-20%	90%	95%	90%	90%
20-40%	10%	5%	10%	10%
40-60%	0%	0%	0%	0%
60-80%	0%	0%	0%	0%
+80%	0%	0%	0%	0%

Source: BofA Merrill Lynch Global Research

**Table 31: Are you deploying desktop virtualization in production?**

	2Q09	3Q09
No	85%	90%
Yes	15%	10%

Source: BofA Merrill Lynch Global Research

95% of CIOs surveyed had plans to add to or maintain their security spend budgets.

## Security

### Security software remained a key recipient of customer wallet share

Security software exhibited resiliency again in our 3Q09 survey with CIO security spend intentions changing little from what they reported in our 2Q survey. 50% of CIOs surveyed did not expect to make any changes (vs. 45% in 2Q) to their security budgets while 45% anticipate an increase (vs. 50% in 2Q). Only 5% had plans to decrease security software purchases. This repeated low intention of cutting security spend validates our thesis of security software being a macro resilient sector of software. Additionally, 26% of CIOs surveyed indicated that security software accounted for 6-10% of their overall software spend (up from 21% in 2Q and 1Q). An increasingly virulent threat environment combined with a demanding regulatory framework has added to the need for CIOs to implement efficient security solutions, in our opinion.

**Table 32: Do you expect Security to increase or decrease as a % of your IT budget in 2009 vs. 2008?**

	1Q09	2Q09	3Q09
Increase	40%	50%	45%
No Change	50%	45%	50%
Decrease	10%	5%	5%

Source: BofA Merrill Lynch Global Research

**Table 33: What % of your overall IT Budget is dedicated to Security?**

	1Q09	2Q09	3Q09
0 to 5%	68%	74%	68%
6 to 10%	21%	21%	26%
11 to 20%	0%	5%	5%
Not applicable/Unsure	11%	0%	0%

Source: BofA Merrill Lynch Global Research

### Data Security came in as the top area for investment in next 12 months

From 25 various areas of security investment, data security remained the top area to attract investment from CIOs, with 47% of respondents expecting to make an investment in the coming 12 months (vs. 53% in 2Q). This is not surprising given the focus of firms on protecting their data and the need set by stringent regulatory requirements. Encryption, firewall and identity management areas registered high priority as well at 42% at the same level seen in 2Q survey. Overall however, our survey yielded a rather fragmented array of spending plans across the board from CIOs.

**Table 34: What are your top areas for security investment in the next 12 months (multiple responses allowed)?**

	1Q09	2Q09	3Q09
<b>Data Security</b>	<b>33%</b>	<b>53%</b>	<b>47%</b>
<b>Encryption</b>	<b>50%</b>	<b>42%</b>	<b>42%</b>
<b>Firewall</b>	<b>17%</b>	<b>42%</b>	<b>42%</b>
<b>Identity Management</b>	<b>50%</b>	<b>42%</b>	<b>42%</b>
Wireless LAN Security	22%	42%	37%
Anti-Virus	28%	37%	32%
Application Security	28%	37%	32%
Host Intrusion Detection	22%	37%	37%
VPN for Remote Office or Partners	28%	37%	37%
E-mail filtering / Anti-Spam	22%	32%	32%
Vulnerability Assessment	28%	32%	26%
Web Content Filtering	28%	32%	37%
Anti-Spyware	17%	26%	26%
Provisioning	44%	26%	21%
Security Information Management / Forensic Analysis/ Event Correlation	28%	26%	26%
Web Filtering	17%	26%	26%
Managed Security Services	22%	21%	21%
Network Intrusion Detection	39%	21%	26%
PKI / Digital Certificates	22%	21%	21%
Security Policy Management	17%	21%	16%
SSL VPN	22%	21%	21%
Tokens / SmartCards	28%	21%	26%
Automated Password Management	33%	16%	11%
Web Single Sign-On	11%	16%	21%
Biometrics	6%	11%	11%

Source: BofA Merrill Lynch Global Research

**Table 35: Comments on top areas of security investment in next 12 months**

Tech	Web single sign-on is an addition from last quarter. It is a new priority.
Tech	He will spend on everything. He cannot prioritize this list. "We're an ISP with 15 million high speed data customers; we need everything on this list," he commented.
Industrial Equipment	In priority order: 1) Encryption, 2) Wireless LAN Security, and 3) Web Content Filtering. Web Content Filtering is a distant third.
Food Products	Ranking is: encryption, security information management, and data security.
Transportation	The priority order is: 1) VPN for Remote Office or Partners, 2) Wireless LAN Security, 3) Data Security, 4) E-mail filtering/Anti-Spam, and 5) Encryption.
Tech	Top priorities, in order, are: encryption, application security, web content filtering, and wireless LAN security.
Energy	Ranking is: network intrusion detection, host intrusion detection, firewall, anti-spyware, anti-virus, and e-mail filtering, anti-spam.
Consumer Goods	Priorities are: Web Content Filtering, Tokens/SmartCards, and Firewall.
Pharma	Top priorities are: Managed security services, web filtering, and identity management. "We have a whole business model around collaboration with third parties; this is the driver," he explained. Office productivity is also a driver. "There is so much garbage, the Internet staff has requested many of the areas noted above," he said.
Consumer Goods	Rank order is: Firewall, Wireless LAN security, and Security Policy Mgt.
Tech	Priorities are: Encryption, Vulnerability Assessment, and Security Policy Management. These are areas where he is trying to improve
Chemicals	He added Host Intrusion Detection and Network Intrusion Detection to the answers from last quarter. In priority order, it is: 1) Identity Management, 2) Automated Password Management, and 3) Application Security. "We are probably just behind in some of these areas, that is executing on our single sign on strategy," he explained.
Tech	He added Network Intrusion Detection and Security Information Management to the choices from last quarter. "The number of attacks keep increasing," he explained. "You have to know which ones are serious and which ones are not," he added. All 4 selections are critical. There is no priority ranking.
Pharma	In ranking order, they are: 1) VPN for remote office or partners, 2) Host intrusion detection, 3) Identify management, and 4) PKI.
Transportation	She added VPN for Remote Officers or Partners to the list from last quarter. She wants to do things to help support external customers. Top priorities are: Data Protection, using Encryption and Security Information Management and possibly by using a managed security service. She may purchase an RBAC (role-based access control) tool, which cuts across identity management and provisioning.
Tech	Top priorities are: Wireless LAN Security, Encryption, and Managed Security Services.
Energy	In priority order: web content filtering, identify management, provisioning, PKI, token cards, and vulnerability assessment.
Food Products	Priority order is: 1) Vulnerability assessment, 2) Host intrusion detection, and 3) application security. This is based on the stage he is at in terms of security performance. "They are all important things, but we've gotten through a certain number of them, so it makes these particular ones important this year," he explained.

Source: BofA Merrill Lynch Global Research

CSCO, CHKP and MFE were top wallet share gainers of CIO security spend

### Cisco's leadership in network security attracts highest investments

Cisco maintained its perch at the top of the security spend tower receiving the most security related investments from CIOs. We believe Cisco's strong product set in the network security arena and market leadership warrants this high customer wallet share. We note however that Check Point and McAfee have made strides in increasing their share and registered 44% and 38% share respectively (up from 29% and 35% in 2Q). Check Point is likely benefiting from its Blade strategy and McAfee's platform security message appears to be resonating with customers resulting in higher market share. Other share gainer of note was Trend Micro at 31% (up from 18% in 2Q).

**Table 36: From which of the following security companies do you expect to purchase more software in the next 12 months?**

	1Q09	2Q09	3Q09
Cisco	50%	53%	50%
Check Point	43%	29%	44%
McAfee	29%	35%	38%
Juniper / NetScreen	21%	24%	31%
RSA Security (EMC)	14%	24%	31%
Trend Micro	14%	18%	31%
Entrust	14%	24%	25%
Microsoft	57%	24%	25%
Symantec	36%	29%	19%
CA	21%	12%	13%
Citrix	21%	12%	13%
IBM	21%	18%	13%
WebSense	14%	12%	13%
Internet Security Systems	14%	6%	6%
Secure Computing	0%	0%	6%
VeriSign	14%	6%	6%
NetIQ	0%	0%	0%
Sonic Wall	0%	0%	0%

Source: BofA Merrill Lynch Global Research

**Table 37: Comments on top companies for security investment in next 12 months**

Tech	CA is an addition from last quarter.
Tech	Choices are CA, CheckPoint, Cisco, Entrust, McAfee, Microsoft, and WebSense.
Transportation	The priority is McAfee and then Trend Micro.
Tech	Top priorities are IBM/ISS and then Juniper.
Energy	He is very worried about malicious hacking into the system. Ranking is: McAfee, CheckPoint, and Entrust.
Pharma	He will also purchase from Postlani, now owned by Google. "Google and the enterprise is something not to sell short; they have a long way to go, but they have unbelievable scale," he said.
Consumer Goods	Ranking order is: Checkpoint, Cisco, and Symantec.
Tech	Priorities are McAfee and Cisco.
Chemicals	He added Check Point and Secure Computing to the answers from last quarter. In priority order: Microsoft, Cisco, Trend Micro, Check Point, and Secure Computing.
Transportation	The choices are Check Point and Entrust. She uses Check Point's Pointsec for FDE. She may add a second anti-virus vendor in 2009. She currently uses Trend. There may be value in having different products deployed at different places. She may use Juniper/NetScreen along with the SAP implementation.
Tech	In priority order: Cisco, Juniper (for firewall), and IBM.
Energy	In priority order: VeriSign, Cisco, McAfee, and Citrix.
Food Products	Symantec is the top priority. It is his company's preferred vendor.

Source: BofA Merrill Lynch Global Research

## Survey Methodology

Our respondent pool includes 21 CIOs from major, well recognized U.S. commercial organizations in the Fortune 1000 spread across different industries such as consumer goods, energy, technology, and transportation verticals. Although our respondent pool is small, the responses provide insight into specific drivers of IT spending and outsourcing decisions. We include a number of the specific direct responses in this report.

**Table 38: Respondents by Vertical**

Industry Vertical	% of survey respondents
Technology	38%
Industrials	5%
Food Products	10%
Energy	10%
Consumer Goods	10%
Pharma	10%
Chemicals	5%
Transportation	14%

Source: BofA Merrill Lynch Global Research

## Analyst Certification

I, Kash Rangan, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

## Important Disclosures

**FUNDAMENTAL EQUITY OPINION KEY:** Opinions include a Volatility Risk Rating, an Investment Rating and an Income Rating. **VOLATILITY RISK RATINGS**, indicators of potential price fluctuation, are: A - Low, B - Medium and C - High. **INVESTMENT RATINGS** reflect the analyst's assessment of a stock's: (i) absolute total return potential and (ii) attractiveness for investment relative to other stocks within its *Coverage Cluster* (defined below). There are three investment ratings: 1 - Buy stocks are expected to have a total return of at least 10% and are the most attractive stocks in the coverage cluster; 2 - Neutral stocks are expected to remain flat or increase in value and are less attractive than Buy rated stocks and 3 - Underperform stocks are the least attractive stocks in a coverage cluster. Analysts assign investment ratings considering, among other things, the 0-12 month total return expectation for a stock and the firm's guidelines for ratings dispersions (shown in the table below). The current price objective for a stock should be referenced to better understand the total return expectation at any given time. The price objective reflects the analyst's view of the potential price appreciation (depreciation).

Investment rating	Total return expectation (within 12-month period of date of initial rating)	Ratings dispersion guidelines for coverage cluster*
Buy	≥ 10%	≤ 70%
Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

\* Ratings dispersions may vary from time to time where BofAML Research believes it better reflects the investment prospects of stocks in a Coverage Cluster.

**INCOME RATINGS**, indicators of potential cash dividends, are: 7 - same/higher (dividend considered to be secure), 8 - same/lower (dividend not considered to be secure) and 9 - pays no cash dividend. *Coverage Cluster* is comprised of stocks covered by a single analyst or two or more analysts sharing a common industry, sector, region or other classification(s). A stock's coverage cluster is included in the most recent BofAML Comment referencing the stock.

## Other Important Disclosures

BofA Merrill Lynch (BofAML) Research refers to the combined Global Research operations of Merrill Lynch and BAS.

Merrill Lynch Research policies relating to conflicts of interest are described at <http://www.ml.com/media/43347.pdf>.

"Merrill Lynch" includes Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S") and its affiliates, including BofA (defined below). "BofA" refers to Banc of America Securities LLC ("BAS"), Banc of America Securities Limited ("BASL"), Banc of America Investment Services, Inc ("BAI") and their affiliates. Investors should contact their Merrill Lynch or BofA representative if they have questions concerning this report.

**Information relating to Non-US affiliates of Merrill Lynch and Distribution of Affiliate Research Reports:**

MLPF&S, BAS, BAI, and BASL distribute, or may in the future distribute, research reports of the following non-US affiliates in the US (short name: legal name): Merrill Lynch (France): Merrill Lynch Capital Markets (France) SAS; Merrill Lynch (Frankfurt): Merrill Lynch International Bank Ltd, Frankfurt Branch; Merrill Lynch (South Africa): Merrill Lynch South Africa (Pty) Ltd; Merrill Lynch (Milan): Merrill Lynch International Bank Limited; MLPF&S (UK): Merrill Lynch, Pierce, Fenner & Smith Limited; Merrill Lynch (Australia): Merrill Lynch Equities (Australia) Limited; Merrill Lynch (Hong Kong): Merrill Lynch (Asia Pacific) Limited; Merrill Lynch (Singapore): Merrill Lynch (Singapore) Pte Ltd; Merrill Lynch (Canada): Merrill Lynch Canada Inc; Merrill Lynch (Mexico): Merrill Lynch Mexico, SA de CV, Casa de Bolsa; Merrill Lynch (Argentina): Merrill Lynch Argentina SA; Merrill Lynch (Japan): Merrill Lynch Japan Securities Co, Ltd; Merrill Lynch (Seoul): Merrill Lynch International Incorporated (Seoul Branch); Merrill Lynch (Taiwan): Merrill Lynch Securities (Taiwan) Ltd.; DSP Merrill Lynch (India): DSP Merrill Lynch Limited; PT Merrill Lynch (Indonesia): PT Merrill Lynch Indonesia; Merrill Lynch (KL) Sdn. Bhd.; Merrill Lynch (Malaysia): Merrill Lynch (Israel): Merrill Lynch Israel Limited; Merrill Lynch (Russia): Merrill Lynch CIS Limited, Moscow; Merrill Lynch (Turkey): Merrill Lynch Yatirim Bankasi A.S.; Merrill Lynch (Dubai): Merrill Lynch International, Dubai Branch; MLPF&S (Zürich rep. office): MLPF&S Incorporated Zürich representative office; Merrill Lynch (Spain); Merrill Lynch Capital Markets Espana, S.A.S.V.

This research report has been approved for publication in the United Kingdom by Merrill Lynch, Pierce, Fenner & Smith Limited and BASL, which are authorized and regulated by the Financial Services Authority; has been considered and distributed in Japan by Merrill Lynch Japan Securities Co, Ltd and Banc of America Securities - Japan, Inc., registered securities dealers under the Financial Instruments and Exchange Law in Japan; is distributed in Hong Kong by Merrill Lynch (Asia Pacific) Limited and Banc of America Securities Asia Limited, which are regulated by the Hong Kong SFC and the Hong Kong Monetary Authority; is issued and distributed in Taiwan by Merrill Lynch Securities (Taiwan) Ltd.; is issued and distributed in Malaysia by Merrill Lynch (KL) Sdn. Bhd., a licensed investment adviser regulated by the Malaysian Securities Commission; is issued and distributed in India by DSP Merrill Lynch Limited; and is issued and distributed in Singapore by Merrill Lynch International Bank Limited (Merchant Bank), Merrill Lynch (Singapore) Pte Ltd (Company Registration No.'s F 06872E and 198602883D respectively) and Bank of America Singapore Limited (Merchant Bank). Merrill Lynch International Bank Limited (Merchant Bank), Merrill Lynch (Singapore) Pte Ltd and Bank of America Singapore Limited (Merchant Bank) are regulated by the Monetary Authority of Singapore. Merrill Lynch Equities (Australia) Limited (ABN 65 006 276 795), AFS License 235132 provides this report in Australia in accordance with section 911B of the Corporations Act 2001 and neither it nor any of its affiliates involved in preparing this research report is an Authorised Deposit-Taking Institution under the Banking Act 1959 nor regulated by the Australian Prudential Regulation Authority. No approval is required for publication or distribution of this report in Brazil.

This research report has been prepared and issued by MLPF&S and/or one or more of its non-US affiliates. MLPF&S is the distributor of this research report in the US and accepts full responsibility for research reports of its non-US affiliates distributed to MLPF&S clients in the US. Any US person (other than BAS, BAI and their respective clients) receiving this research report and wishing to effect any transaction in any security discussed in the report should do so through MLPF&S and not such foreign affiliates.

BAS distributes this research report to its clients and to its affiliate BAI and accepts responsibility for the distribution of this report in the US to BAS clients, but not to the clients of BAI. BAI is a registered broker-dealer, member of FINRA and SIPC, and is a non-bank subsidiary of Bank of America, N.A. BAI accepts responsibility for the distribution of this report in the US to BAI clients. Transactions by US persons that are BAS or BAI clients in any security discussed herein must be carried out through BAS and BAI, respectively.

#### General Investment Related Disclosures:

This research report provides general information only. Neither the information nor any opinion expressed constitutes an offer or an invitation to make an offer, to buy or sell any securities or other financial instrument or any derivative related to such securities or instruments (e.g., options, futures, warrants, and contracts for differences). This report is not intended to provide personal investment advice and it does not take into account the specific investment objectives, financial situation and the particular needs of any specific person. Investors should seek financial advice regarding the appropriateness of investing in financial instruments and implementing investment strategies discussed or recommended in this report and should understand that statements regarding future prospects may not be realized. Any decision to purchase or subscribe for securities in any offering must be based solely on existing public information on such security or the information in the prospectus or other offering document issued in connection with such offering, and not on this report.

Securities and other financial instruments discussed in this report, or recommended, offered or sold by Merrill Lynch, are not insured by the Federal Deposit Insurance Corporation and are not deposits or other obligations of any insured depository institution (including, Bank of America, N.A.). Investments in general and, derivatives, in particular, involve numerous risks, including, among others, market risk, counterparty default risk and liquidity risk. No security, financial instrument or derivative is suitable for all investors. In some cases, securities and other financial instruments may be difficult to value or sell and reliable information about the value or risks related to the security or financial instrument may be difficult to obtain. Investors should note that income from such securities and other financial instruments, if any, may fluctuate and that price or value of such securities and instruments may rise or fall and, in some cases, investors may lose their entire principal investment. Past performance is not necessarily a guide to future performance. Levels and basis for taxation may change.

This report may contain a short-term trading idea or recommendation, which highlights a specific near-term catalyst or event impacting the company or the market that is anticipated to have a short-term price impact on the equity securities of the company. Short-term trading ideas and recommendations are different from and do not affect a stock's fundamental equity rating, which reflects both a longer term total return expectation and attractiveness for investment relative to other stocks within its Coverage Cluster. Short-term trading ideas and recommendations may be more or less positive than a stock's fundamental equity rating.

Foreign currency rates of exchange may adversely affect the value, price or income of any security or financial instrument mentioned in this report. Investors in such securities and instruments, including ADRs, effectively assume currency risk.

UK Readers: The protections provided by the U.K. regulatory regime, including the Financial Services Scheme, do not apply in general to business coordinated by Merrill Lynch entities located outside of the United Kingdom. These disclosures should be read in conjunction with the BASL general policy statement on the handling of research conflicts, which is available upon request.

Officers of MLPF&S or one or more of its affiliates (other than research analysts) may have a financial interest in securities of the issuer(s) or in related investments.

Merrill Lynch is a regular issuer of traded financial instruments linked to securities that may have been recommended in this report. Merrill Lynch may, at any time, hold a trading position (long or short) in the securities and financial instruments discussed in this report.

Merrill Lynch, through business units other than BofAML Research, may have issued and may in the future issue trading ideas or recommendations that are inconsistent with, and reach different conclusions from, the information presented in this report. Such ideas or recommendations reflect the different time frames, assumptions, views and analytical methods of the persons who prepared them, and Merrill Lynch is under no obligation to ensure that such other trading ideas or recommendations are brought to the attention of any recipient of this report.

#### Copyright and General Information regarding Research Reports:

Copyright 2009 Merrill Lynch, Pierce, Fenner & Smith Incorporated. All rights reserved. iQmethod, iQmethod 2.0, iQprofile, iQtoolkit, iQworks are service marks of Merrill Lynch & Co., Inc. iQanalytics®, iQcustom®, iQdatabase® are registered service marks of Merrill Lynch & Co., Inc. This research report is prepared for the use of Merrill Lynch clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of Merrill Lynch. Merrill Lynch research reports are distributed simultaneously to internal and client websites and other portals by Merrill Lynch and are not publicly-available materials. Any unauthorized use or disclosure is prohibited. Receipt and review of this research report constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion, or information contained in this report (including any investment recommendations, estimates or price targets) without first obtaining expressed permission from an authorized officer of Merrill Lynch.

Materials prepared by Merrill Lynch research personnel are based on public information. Facts and views presented in this material have not been reviewed by, and may not reflect information known to, professionals in other business areas of Merrill Lynch, including investment banking personnel. Merrill Lynch has established information barriers between BofAML Research and certain business groups. As a result, Merrill Lynch does not disclose certain client relationships with, or compensation received from, such companies in research reports.

To the extent this report discusses any legal proceeding or issues, it has not been prepared as nor is it intended to express any legal conclusion, opinion or advice. Investors should consult their own legal advisers as to issues of law relating to the subject matter of this report. Merrill Lynch research personnel's knowledge of legal proceedings in which any Merrill Lynch entity and/or its directors, officers and employees may be plaintiffs, defendants, co-defendants or co-plaintiffs with or involving companies mentioned in this report is based on public information. Facts and views presented in this material that relate to any such proceedings have not been reviewed by, discussed with, and may not reflect information known to, professionals in other business areas of Merrill Lynch in connection with the legal proceedings or matters relevant to such proceedings."

This report has been prepared independently of any issuer of securities mentioned herein and not in connection with any proposed offering of securities or as agent of any issuer of any securities. None of MLPF&S, any of its affiliates or their research analysts has any authority whatsoever to make any representation or warranty on behalf of the issuer(s). Merrill Lynch policy prohibits research personnel from disclosing a recommendation, investment rating, or investment thesis for review by an issuer prior to the publication of a research report containing such rating, recommendation or investment thesis.

Any information relating to the tax status of financial instruments discussed herein is not intended to provide tax advice or to be used by anyone to provide tax advice. Investors are urged to seek tax advice based on their particular circumstances from an independent tax professional.

The information herein (other than disclosure information relating to Merrill Lynch and its affiliates) was obtained from various sources and we do not guarantee its accuracy. This report may contain links to third-party websites. Merrill Lynch is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this report and is not incorporated by reference into this report. The inclusion of a link in this report does not imply any endorsement by or any affiliation with Merrill Lynch. Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. Merrill Lynch is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

Subject to the quiet period applicable under laws of the various jurisdictions in which we distribute research reports and other legal and Merrill Lynch policy-related restrictions on the publication of research reports, fundamental equity reports are produced on a regular basis as necessary to keep the investment recommendation current.

Certain outstanding reports may contain discussions and/or investment opinions relating to securities, financial instruments and/or issuers that are no longer current. Always refer to the most recent research report relating to a company or issuer prior to making an investment decision.

In some cases, a company or issuer may be classified as Restricted or may be Under Review or Extended Review. In each case, investors should consider any investment opinion relating to such company or issuer (or its security and/or financial instruments) to be suspended or withdrawn and should not rely on the analyses and investment opinion(s) pertaining to such issuer (or its securities and/or financial instruments) nor should the analyses or opinion(s) be considered a solicitation of any kind. Sales persons and financial advisors affiliated with BAS, BAI, MLPF&S or any of their affiliates may not solicit purchases of securities or financial instruments that are Restricted or Under Review and may only solicit securities under Extended Review in accordance with firm policies.

Neither Merrill Lynch nor any officer or employee of Merrill Lynch accepts any liability whatsoever for any direct, indirect or consequential damages or losses arising from any use of this report or its contents.