Americas: Technology



Removing Satyam from favorite growth list due to stop loss

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We are removing Satyam Computer Services (Buy) from the favorite growth list of the Goldman Sachs Technology Framework. Satyam is down 15.4% since its addition to the favorite growth list on 7/31/2008, exceeding our stop loss limit, vs. the S&P 500 down 5.9%. Over the last 12 months, Satyam is down 24.6% vs. the S&P 500 down 19.6%.

Satyam ADR shares remain Buy rated, and there are no changes to our estimates. In our view, the decline in SAY shares is driven by concerns regarding potential negative revenue impact from its financial services clients that are affected by recent developments in the capital markets sector, and incorrect press articles regarding its planned workforce reductions. Satyam's management indicated that there was no change to its 2QFY guidance, and that barring this weekend's developments, volume trends through mid-September were tracking in line with expectations. Given continued turmoil in the financial services sector, we expect investor attention to remain focused on the relative exposure to financial services at 21%, Satyam's exposure remains one of the lowest versus its offshore peers where the average contribution is closer to 30%. Regarding its workforce, the company continues to target 14,000-15,000 gross adds for FY2009, and its recent workforce reductions totaled 450 employees, not 4,500 as suggested by the press, part of the usual 2-2.5% annual performance review program.

Our 12-month price target of \$27 remains unchanged. Our price target is derived using a weighted average model incorporating our sector relative Investment Framework, FTM P/E, and EV/EBITDA multiples. Risks to our view include: (1) Negative legal development on the Upaid litigation (2) Further deterioration in demand. (3) Pricing and utilization deterioration.

As noted previously, we have instituted a "stop-loss" feature to try to protect our lists from the volatility that can be exhibited by technology stocks. We will continue to remove any stock that moves more than our stop loss threshold in the opposite direction from our view. For example, a Favorite Growth stock that declines more than our stop loss threshold from the time it is added to the list will subsequently be removed. Similarly, a Least Favorite stock that appreciates more than our stop loss threshold from the time it is added to the list will be removed as well.

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Exhibit 1: Satyam price performance relative to the GS technology sector and the S&P 500

| Company | Ticker | Primary analyst | Price currency | Price as of 09/15/08 | Price as of 07/31/08 | Price performance since 07/31/08 | 3 month price performance | 6 month price performance | 12 month price performance |
|--|--------------|--|----------------|-------------------------|-------------------------|----------------------------------|------------------------------|------------------------------|-------------------------------|
| Americas Technology Peer Group | | | | | | | | | |
| Satyam Computer Svcs. Ltd. (ADR) | SAY | Julio C. Quinteros Jr. | \$ | 18.05 | 21.34 | -15.4% | -33.9% | -18.2% | -24.6% |
| 3PAR INC | PAR | David C. Bailey | \$ | 9.46 | 8.10 | 16.8% | -5.4% | 30.7% | |
| Accenture, Ltd. | ACN | Julio C. Quinteros Jr. | \$ | 36.22 | 41.76 | -13.3% | -7.6% | 8.6% | -8.7% |
| Acme Packet, Inc. | APKT | Simona Jankowski, CFA | \$ | 6.11 | 4.86 | 25.7% | -28.6% | -16.1% | -57.7% |
| Adobe Systems Inc. | ADBE | Sasa Zorovic, Ph.D | \$ | 38.27 | 41.35 | -7.4% | -10.4% | 17.4% | -11.8% |
| Advanced Energy Industries, Inc. | AEIS | James Covello | \$ | 13.64 | 13.82 | -1.3% | -3.7% | 1.6% | -11.1% |
| Advanced Micro Devices, Inc. | AMD | James Covello | \$ | 5.18 | 4.21 | 23.0% | -31.1% | -18.8% | -59.2% |
| Affiliated Computer Services, Inc. | ACS | Julio C. Quinteros Jr. | \$ | 49.30 | 48.20 | 2.3% | -12.7% | -0.8% | -0.4% |
| Akamai Technologies, Inc. | AKAM ALTR | Derek R. Bingham | \$ \$ | 17.00 20.00 | 23.34 21.93 | -27.2% -8.8% | -53.2% -12.4% | -45.5% | -45.7% |
| Altera Corp. Amdocs Limited | DOX | James Schneider, Ph.D. Julio C. Quinteros Jr. | \$ \$ | 27.30 | 30.41 | -10.2% | -12.4% | 14.0% -8.2% | -15.8% -21.0% |
| Analog Devices, Inc. | ADI | Craig Hettenbach | \$ | 26.23 | 30.51 | -14.0% | -22.7% | -5.1% | -25.4% |
| Apple Inc. | AAPL | David C. Bailey | \$ | 140.74 | 158.95 | -11.5% | -18.4% | 11.2% | 1.4% |
| Applied Materials, Inc. | AMAT | James Covello | \$ | 16.34 | 17.32 | -5.7% | -18.7% | -20.6% | -19.6% |
| Applied Micro Circuits | AMCC | James Schneider, Ph.D. | \$ | 6.65 | 7.76 | -14.3% | -27.7% | -7.0% | -44.6% |
| Aruba Networks, Inc. | ARUN | Thomas D. Lee | \$ | 5.13 | 5.83 | -12.0% | -16.6% | -1.0% | -72.1% |
| ATMI, Inc. | ATMI | James Covello | \$ | 18.93 | 22.53 | -16.0% | -33.9% | -27.8% | -37.0% |
| Autodesk Inc. | ADSK | Sasa Zorovic, Ph.D | \$ | 33.51 | 31.89 | 5.1% | -13.1% | -1.7% | -29.5% |
| Automatic Data Processing Inc. | ADP | Julio C. Quinteros Jr. | \$ | 44.29 | 42.71 | 3.7% | 2.7% | 12.5% | -0.4% |
| Axcelis Technologies, Inc. | ACLS | James Covello | \$ | 1.43 | 5.02 | -71.5% | -75.2% | -74.4% | -70.2% |
| BMC Software, Inc. | BMC | Derek R. Bingham | \$ | 31.13 | 32.89 | -5.4% | -18.8% | -7.8% | 0.9% |
| Broadcom Corporation | BRCM | James Schneider, Ph.D. | \$ | 21.37 | 24.29 | -12.0% | -17.1% | 25.5% | -39.8% |
| Brocade Communications Systems | BRCD | Min Park | \$ | 7.10 | 6.75 | 5.2% | -21.9% | -1.0% | -3.5% |
| Brooks Automation, Inc. | BRKS | James Covello | \$ | 9.05 | 7.81 | 15.9% | -5.9% | -6.3% | -34.8% |
| CA, Inc. | CA | Sarah Friar | \$ | 21.53 | 24.02 | -10.4% | -10.7% | -2.4% | -12.7% |
| Check Point Software Tech. | CHKP | Sarah Friar | \$ | 24.35 | 22.83 | 6.7% | -3.3% | 7.9% | -0.2% |
| Cisco Systems, Inc. | CSCO | Simona Jankowski, CFA | \$ | 22.38 | 21.99 | 1.8% | -15.1% | -8.0% | -29.1% |
| Citrix Systems Inc. | CTXS | Sarah Friar | \$ | 27.48 | 26.64 | 3.2% | -17.2% | -10.8% | -27.5% |
| Cognizant Technology Solutions | CTSH | Julio C. Quinteros Jr. | \$ | 24.89 | 28.07 | -11.3% | -30.4% | -8.7% | -30.9% |
| CommVault Systems, Inc. | CVLT | Derek R. Bingham | \$ | 14.87 | 15.23 | -2.4% | -14.2% | 9.2% | -18.6% |
| Computer Sciences Corp. | CSC | Julio C. Quinteros Jr. | \$ | 43.80 | 47.37 | -7.5% | -8.4% | 6.5% | -19.0% |
| Data Domain, Inc. | DDUP | David C. Bailey | \$ | 19.98 | 21.56 | -7.3% | -18.5% | -2.7% | -31.8% |
| Dell Inc. | DELL | David C. Bailey | \$ | 17.99 | 24.57 | -26.8% | -26.3% | -7.3% | -31.8% |
| Digital River, Inc. | DRIV | Sasa Zorovic, Ph.D | \$ | 39.01 | 39.89 | -2.2% | -4.7% | 23.5% | -12.1% |
| EMC Corporation | EMC | David C. Bailey | \$ | 13.28 | 15.01 | -11.5% | -19.5% | -10.2% | -31.1% |
| Emulex Corp. | ELX ENTG | Min Park | \$ \$ | 12.06 5.29 | 11.27 6.33 | 7.0% -16.4% | -9.7% -29.2% | -26.0% | -35.1% |
| Entegris, Inc. | EXLS | James Covello Vincent Lin | \$ \$ | 10.79 | 15.05 | -16.4% | -29.2% -28.8% | -20.8% -46.8% | -42.6% -47.5% |
| ExlService Holdings, Inc. Fidelity National Information Svcs. | FIS | Julio C. Quinteros Jr. | \$ | 20.88 | 18.95 | 10.2% | -26.6 % -47.8 % | -44.6% | -54.9% |
| Fisery, Inc. | FISV | Julio C. Quinteros Jr. | \$ | 52.93 | 47.82 | 10.2% | 5.2% | 9.9% | 10.5% |
| FormFactor, Inc. | FORM | James Covello | \$ | 18.19 | 17.40 | 4.5% | -14.8% | 5.9% | -60.7% |
| Genpact Ltd. | G | Vincent Lin | \$ | 12.70 | 13.26 | -4.2% | -15.9% | -0.8% | -12.8% |
| Global Cash Access Holdings | GCA | Julio C. Quinteros Jr. | \$ | 4.96 | 5.99 | -17.2% | -33.7% | 2.3% | -55.5% |
| Global Payments Inc. | GPN | Julio C. Quinteros Jr. | \$ | 45.13 | 44.29 | 1.9% | -4.5% | 19.0% | 10.6% |
| Heartland Payment Systems, Inc. | HPY | Julio C. Quinteros Jr. | \$ | 25.93 | 23.01 | 12.7% | -2.2% | 26.9% | -4.0% |
| Hewitt Associates, Inc. | HEW | Julio C. Quinteros Jr. | \$ | 39.25 | 36.85 | 6.5% | 3.0% | 0.5% | 15.3% |
| Hewlett-Packard Co. | HPQ | David C. Bailey | \$ | 45.33 | 44.80 | 1.2% | -4.5% | -1.3% | -6.3% |
| Infinera Corp. | INFN | Simona Jankowski, CFA | \$ | 8.04 | 11.26 | -28.6% | -38.2% | -23.6% | -51.8% |
| Informatica Corp. | INFA | Sasa Zorovic, Ph.D | \$ | 15.71 | 16.19 | -3.0% | -8.1% | -10.4% | 7.1% |
| Infosys Technologies Ltd. (ADR) | INFY | Julio C. Quinteros Jr. | \$ | 34.80 | 39.39 | -11.7% | -26.5% | 2.5% | -26.3% |
| Ingram Micro Inc. | IM | Min Park | \$ | 17.52 | 18.43 | -4.9% | -3.8% | 14.8% | -7.4% |
| Intel Corp. | INTC | James Covello | \$ | 19.36 | 22.19 | -12.8% | -14.6% | -6.3% | -22.3% |
| International Business Machines | IBM | David C. Bailey | \$ | 115.19 | 127.98 | -10.0% | -8.7% | 0.0% | 0.1% |
| International Rectifier Corp. | IRF | Craig Hettenbach | \$ | 21.28 | 16.88 | 26.1% | -12.2% | -0.6% | -31.1% |
| Intersil Corp. | ISIL | Craig Hettenbach | \$ | 17.50 | 24.13 | -27.5% | -32.4% | -29.2% | -43.3% |
| Intevac, Inc. | IVAC | Hongyu Cai, CFA | \$ | 11.01 | 10.65 | 3.4% | -9.8% | -12.4% | -27.7% |
| Intuit, Inc. | INTU | Sasa Zorovic, Ph.D | \$ | 29.66 | 27.33 | 8.5% | 0.9% | 16.2% | 4.2% |
| Isilon Systems, Inc. | ISLN | David C. Bailey | \$ | 4.84 | 4.79 | 1.0% | -1.6% | -4.7% | -46.3% |
| Juniper Networks, Inc. | JNPR | Simona Jankowski, CFA | \$ | 25.21 | 26.03 | -3.2% | 4.2% | 2.1% | -29.2% |
| Kenexa Corporation | KNXA | Sasa Zorovic, Ph.D | \$ | 15.94 | 18.69 | -14.7% | -17.7% | -12.5% | -39.5% |
| KLA-Tencor | KLAC | James Covello | \$ | 32.30 | 37.59 | -14.1% | -22.9% | -10.7% | -42.5% |
| Lam Research Corp. | LRCX | James Covello | \$ | 31.14 | 32.89 | -5.3% | -15.9% | -19.2% | -38.2% |
| Lattice Semiconductor Corp. | LSCC LDIS | James Schneider, Ph.D. James Schneider, Ph.D. | \$ | 2.33 | 2.42 | -3.7% | -40.3% | -11.4% | -52.5% |
| Leadis Technology Lender Processing Services, Inc. | LDIS | James Schneider, Ph.D. Julio C. Quinteros Jr. | \$ \$ | 0.95 | 1.21 33.35 | -21.5% -0.1% | -41.7% | -50.0% | -69.6% |
| Lender Processing Services, inc. Lexmark International Group | LPS | Min Park | \$ \$ | 33.30 33.50 | 35.35 35.08 | -0.1% -4.5% | -5.1% | 7.2% | -7.4% |
| Limelight Networks, Inc. | LLNW | Derek R. Bingham | \$ \$ | 2.97 | 3.55 | -4.5% | -5.1% -4.2% | -22.5% | -7.4% -65.6% |
| Linear Technology Corp. | LLINW | Craig Hettenbach | \$ \$ | 29.38 | 31.05 | -16.3% | -13.8% | -22.5% | -14.9% |
| LSI Corp. | LSI | James Schneider, Ph.D. | \$ \$ | 6.07 | 6.94 | -12.5% | -13.3% | 22.4% | -14.6% |
| | 201 | Junios Comitiati, i II.D. | Ψ | | | | | | |
| S&P 500 | | | | 1192.69 | 1267.38 | -5.9% | -12.3% | -7.4% | -19.6% |

Note: Prices as of most recent available close, which could vary from the price date indicated above
This table shows movement in absolute share price and not total shareholder return. Results presented should not and cannot be viewed as an indicator of future performance.

Source: Factset, Quantum database.

Exhibit 2: Satyam price performance relative to the GS technology sector and the S&P 500, cont'd

| Company | Ticker | Primary analyst | Price currency | Price as of 09/15/08 | Price as of 07/31/08 | Price performance since 07/31/08 | 3 month price performance | 6 month price performance | 12 month price performance |
|--|-------------|---|-------------------|-------------------------|-------------------------|-------------------------------------|------------------------------|---------------------------|----------------------------|
| Americas Technology Peer Group | | | | | | | | | |
| Satyam Computer Svcs. Ltd. (ADR) | SAY | Julio C. Quinteros Jr. | \$ | 18.05 | 21.34 | -15.4% | -33.9% | -18.2% | -24.6% |
| Macrovision Solutions Corp. | MVSN | Sasa Zorovic, Ph.D | \$ | 15.63 | 15.20 | 2.8% | -4.8% | 13.1% | -30.4% |
| Marvell Technology Group Ltd. | MRVL | James Schneider, Ph.D. | \$ | 10.80 | 14.79 | -27.0% | -36.0% | -4.2% | -34.1% |
| Mastercard Inc. | MA | Julio C. Quinteros Jr. | \$ | 211.77 | 244.15 | -13.3% | -27.6% | 1.5% | 53.6% |
| Maxim Integrated Products | MXIM | Craig Hettenbach | \$ | 17.54 | 19.64 | -10.7% | -20.6% | -1.4% | -39.8% |
| McAfee, Inc. | MFE | Sarah Friar | \$ | 35.66 | 32.75 | 8.9% | -1.4% | 3.8% | 0.8% |
| Micrel, Inc. | MCRL | Craig Hettenbach | \$ | 8.79 | 9.52 | -7.7% | -8.1% | 3.8% | -18.5% |
| Microchip Technology Inc. | MCHP | Craig Hettenbach | \$ | 28.64 | 31.93 | -10.3% | -9.8% | -10.7% | -22.3% |
| Micron Technology Inc. | MU MSFT | James Covello Sarah Friar | \$ \$ | 4.34 26.82 | 4.83 25.72 | -10.1% 4.3% | -43.3% -7.7% | -29.3% -4.1% | -60.5% -7.6% |
| Microsoft Corp. MKS Instruments, Inc. | MKSI | James Covello | \$ \$ | 20.62 | 20.60 | 0.2% | -15.5% | 1.4% | 2.6% |
| Monolithic Power Systems | MPWR | Craig Hettenbach | \$ | 18.50 | 21.75 | -14.9% | -24.0% | 13.8% | -8.7% |
| Motorola, Inc. | MOT | Simona Jankowski, CFA | \$ | 7.65 | 8.64 | -11.5% | -16.2% | -19.9% | -54.9% |
| National Semiconductor Corp. | NSM | Craig Hettenbach | \$ | 17.29 | 20.95 | -17.5% | -26.3% | -4.2% | -32.0% |
| Netgear, Inc. | NTGR | Thomas D. Lee | \$ | 15.13 | 15.15 | -0.1% | -7.6% | -22.6% | -47.2% |
| NetSuite Inc. | N | Sasa Zorovic, Ph.D | \$ | 15.48 | 17.26 | -10.3% | -26.6% | -22.6% | |
| Network Appliance Inc. | NTAP | Min Park | \$ | 23.36 | 25.55 | -8.6% | -3.2% | 10.8% | -13.4% |
| Novellus Systems Inc. | NVLS | James Covello | \$ | 20.28 | 20.37 | -0.4% | -6.2% | -6.7% | -24.1% |
| Nuance Communications, Inc. | NUAN | Derek R. Bingham | \$ | 14.23 | 15.52 | -8.3% | -15.0% | -17.1% | -21.9% |
| Nvidia Corp. | NVDA | James Schneider, Ph.D. | \$ | 9.30 | 11.44 | -18.7% | -56.4% | -49.2% | -71.2% |
| Omniture, Inc. | OMTR | Sasa Zorovic, Ph.D | \$ | 18.35 | 17.35 | 5.8% | -17.9% | -16.3% | -32.6% |
| Oracle Corp. | ORCL | Sarah Friar | \$ | 19.01 | 21.53 | -11.7% | -16.0% | -2.6% | -5.3% |
| Parametric Technology Corp. | PMTC | Sasa Zorovic, Ph.D | \$ | 19.18 | 19.37 | -1.0% | 7.5% | 33.4% | 13.8% |
| Patni Computer Systems Ltd. (ADR) | PTI | Nitya Thomas | \$ | 8.37 | 10.35 | -19.1% | -28.3% | -21.7% | -62.3% |
| Paychex, Inc. | PAYX | Julio C. Quinteros Jr. | \$ | 33.18 | 32.92 | 0.8% | -1.4% | 6.7% | -23.0% |
| Pitney Bowes Inc. | PBI | Julio C. Quinteros Jr. | \$ | 35.81 | 31.69 | 13.0% | -2.1% | 1.6% | -20.6% |
| PMC-Sierra, Inc. | PMCS | James Schneider, Ph.D. | \$ | 7.84 | 7.24 | 8.3% | -11.1% | 59.7% | 0.8% |
| Powerwave Technologies, Inc. | PWAV | Thomas D. Lee | \$ | 4.50 | 4.10 | 9.8% | 4.7% | 93.1% | -32.4% |
| QLogic Corp. | QLGC | Min Park | \$ | 18.44 | 18.84 | -2.1% | 22.2% | 17.9% | 45.5% |
| QUALCOMM, Inc. | QCOM | Simona Jankowski, CFA | \$ | 46.82 | 55.34 | -15.4% | -6.3% | 19.3% | 18.7% |
| Quest Software, Inc. | QSFT | Derek R. Bingham | \$ | 13.96 | 15.11 | -7.6% | -12.9% | 12.2% | -6.2% |
| Red Hat, Inc. | RHT | Sarah Friar | \$ | 17.83 | 21.38 | -16.6% | -19.9% | 4.6% | -6.6% |
| Research In Motion Ltd. | RIMM | Simona Jankowski, CFA | \$ | 98.44 | 122.82 | -19.9% | -26.0% | -3.2% | 12.8% |
| Research In Motion Ltd. | RIM.TO | Simona Jankowski, CFA | C\$ | 104.60 | 125.84 | -16.9% | -23.5% | 4.4% | 16.2% |
| RightNow Technologies, Inc. | RNOW | Sasa Zorovic, Ph.D | \$ | 11.39 | 16.09 | -29.2% | -21.4% | 12.7% | -17.8% |
| Riverbed Technology, Inc. | RVBD | Simona Jankowski, CFA | \$ | 15.61 | 15.87 | -1.6% | 13.7% | -3.3% | -60.5% |
| Salesforce.com, Inc. | CRM | Sasa Zorovic, Ph.D | \$ | 54.80 | 63.79 | -14.1% | -24.7% | -5.3% | 18.2% |
| SanDisk Corporation | SNDK SAP | James Covello | \$ | 14.41 54.02 | 14.10 | 2.2% | -40.0% 1.5% | -34.9% | -71.9% |
| SAP (ADR) | | Sarah Friar | \$ \$ | | 57.81 | -6.6% | 21.2% | 10.7% | -6.0% 32.0% |
| Sapient | SAPE STX | Julio C. Quinteros Jr. David C. Bailey | \$ \$ | 8.30 13.17 | 6.46 14.97 | 28.5% -12.0% | -35.0% | 18.7% -40.7% | -46.6% |
| Seagate Technology | SCUR | | \$ \$ | 3.78 | 3.93 | -3.8% | -23.6% | -46.1% | -58.8% |
| Secure Computing Corp. Semtech Corporation | SMTC | Sarah Friar Craig Hettenbach | \$ \$ | 13.69 | 3.93 14.57 | -3.6% -6.0% | -23.6% -15.4% | 2.2% | -28.0% |
| Sigma Designs, Inc. | SIGM | James Schneider, Ph.D. | \$ \$ | 14.14 | 17.54 | -19.4% | -15.4% | -32.9% | -67.8% |
| Silicon Image, Inc. | SIMG | James Schneider, Ph.D. | \$ | 5.71 | 7.01 | -18.5% | -22.8% | 20.7% | 10.9% |
| SiRF Technology Holdings, Inc. | SIRF | James Schneider, Ph.D. | \$ | 1.90 | 3.40 | -44.1% | -70.2% | -70.1% | -90.6% |
| Starent Networks, Corp. | STAR | Thomas D. Lee | \$ | 11.73 | 13.10 | -10.5% | -28.0% | -9.2% | -33.0% |
| SuccessFactors, Inc. | SFSF | Sarah Friar | \$ | 11.00 | 10.53 | 4.4% | -3.0% | 33.3% | 00.070 |
| Sun Microsystems | JAVA | David C. Bailey | \$ | 8.78 | 10.63 | -17.4% | -25.1% | -46.5% | -61.7% |
| Symantec Corp. | SYMC | Sarah Friar | \$ | 20.11 | 21.07 | -4.6% | -0.5% | 22.2% | 3.1% |
| Taleo Corporation | TLEO | Sasa Zorovic, Ph.D | \$ | 20.42 | 18.74 | 9.0% | 3.2% | 15.8% | -10.4% |
| Tech Data Corp. | TECD | Min Park | \$ | 30.62 | 34.87 | -12.2% | -13.9% | -2.9% | -22.1% |
| Teradyne, Inc. | TER | James Covello | \$ | 8.26 | 9.37 | -11.8% | -27.9% | -31.1% | -40.5% |
| Texas Instruments Inc. | TXN | James Covello | \$ | 21.91 | 24.38 | -10.1% | -27.4% | -22.3% | -36.8% |
| TIBCO Software Inc. | TIBX | Derek R. Bingham | \$ | 7.60 | 8.21 | -7.4% | 2.3% | 3.8% | 3.3% |
| Total System Services, Inc. | TSS | Julio C. Quinteros Jr. | \$ | 17.94 | 19.58 | -8.4% | -26.9% | -17.7% | -36.1% |
| Trident Microsystems, Inc. | TRID | James Schneider, Ph.D. | \$ | 2.85 | 2.97 | -4.0% | -31.2% | -44.9% | -79.5% |
| Unisys Corporation | UIS | Julio C. Quinteros Jr. | \$ | 3.54 | 3.69 | -4.1% | -23.0% | -14.1% | -46.7% |
| VeriFone Holdings, Inc. | PAY | Julio C. Quinteros Jr. | \$ | 17.59 | 14.96 | 17.6% | 23.3% | 11.0% | -55.2% |
| Verigy Ltd. | VRGY | James Covello | \$ | 17.48 | 22.23 | -21.4% | -25.6% | -1.4% | -31.3% |
| VeriSign, Inc. | VRSN | Sarah Friar | \$ | 25.14 | 32.54 | -22.7% | -36.9% | -23.6% | -20.6% |
| Visa Inc. | V | Julio C. Quinteros Jr. | \$ | 69.38 | 73.06 | -5.0% | -14.9% | | |
| VMware, Inc. | VMW | David C. Bailey | \$ | 33.67 | 35.85 | -6.1% | -49.4% | -32.4% | -56.8% |
| Volterra Semiconductor Corp. | VLTR | Craig Hettenbach | \$ | 13.58 | 16.40 | -17.2% | -20.7% | 45.9% | 19.1% |
| Western Digital Corp. | WDC | David C. Bailey | \$ | 22.75 | 28.79 | -21.0% | -39.3% | -27.2% | 1.7% |
| Western Union Co. | WU | Julio C. Quinteros Jr. | \$ | 25.56 | 27.64 | -7.5% | 6.4% | 24.0% | 27.0% |
| Wipro Ltd. (ADR) | WIT | Julio C. Quinteros Jr. | \$ | 9.94 | 11.26 | -11.7% | -26.5% | -3.6% | -27.2% |
| WNS (Holdings) Ltd. | WNS | Vincent Lin | \$ | 11.12 | 17.00 | -34.6% | -39.9% | -23.0% | -38.6% |
| XILINX Corp. | XLNX | James Schneider, Ph.D. | \$ | 22.48 | 24.83 | -9.5% | -18.2% | -4.0% | -12.7% |
| Zoran Corporation | ZRAN | James Schneider, Ph.D. | \$ | 8.17 | 8.27 | -1.2% | -39.5% | -41.1% | -57.0% |
| S&P 500 | | | | 1192.69 | 1267.38 | -5.9% | -12.3% | -7.4% | -19.6% |

Note: Prices as of most recent available close, which could vary from the price date indicated above
This table shows movement in absolute share price and not total shareholder return. Results presented should not and cannot be viewed as an indicator of future performance.

Source: Factset, Quantum database.

Reg AC

We, Sarah Friar, James Covello, Julio C. Quinteros Jr. and Derek R. Bingham, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

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The precise calculation of each metric may vary depending on the fiscal year, industry and region but the standard approach is as follows:

Growth is a composite of next year's estimate over current year's estimate, e.g. EPS, EBITDA, Revenue. **Return** is a year one prospective aggregate of various return on capital measures, e.g. CROCI, ROACE, and ROE. **Multiple** is a composite of one-year forward valuation ratios, e.g. P/E, dividend yield, EV/FCF, EV/EBITDA, EV/DACF, Price/Book. **Volatility** is measured as trailing twelve-month volatility adjusted for dividends.

Quantum

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Sarah Friar: America-Software Group. James Covello: America-Semi Device, America-Semiconductor Capital Equipment. Julio C. Quinteros Jr.: America - IT Services: India, America-IT Consulting and Outsourcing, America-Transaction Processors, Indian IT Services. Derek R. Bingham: America-Software Group.

America - IT Services: India: Cognizant Technology Solutions, ExIService Holdings, Inc., Genpact Ltd., Infosys Technologies Ltd. (ADR), Patni Computer Systems Ltd (ADR), Satyam Computer Svcs. Ltd. (ADR), Wipro Ltd. (ADR), WNS (Holdings) Ltd..

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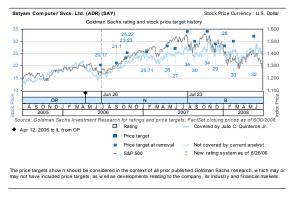
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Goldman Sachs Investment Research global coverage universe

| | Ra | ating Distribution | on | _ | Investment Banking Relationships | | | | |
|--------|-----|--------------------|------|---|----------------------------------|------|------|--|--|
| | Buy | Hold | Sell | | Buy | Hold | Sell | | |
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Price target and rating history chart(s)



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