UBS PaineWebber

Global Equity Research

United States

Country Weekly

Market Commentary

U.S. Portfolio Managers' Spotlight

April 17, 2003

Economic Outlook

- **Dissonance: Unemployment Rate Versus Payrolls**: The unemployment rate has risen less than one might have expected based on the weakness in nonfarm payrolls recently. The labor force participation rate has declined, but it typically drops below trend when the labor market is subpar. A more important factor has been the relatively stronger performance of employment in the household survey. We believe unemployment is overdue to rise by a bit more. But the data have been dissonant for long enough to raise suspicion that weakness in payrolls has been overstated. *Jim O'Sullivan* *p. 3*

Spotlight On…

- **Are the Bells Growing Less Profitable?: Q-Series™** After years of anticipation by Bell bears, margin pressure should, in our view, become the hallmark of results within the domestic telecom units of the leading carriers beginning in 2003. *John Hodulik, CFA* *p. 10*
- **Brokerage Industry: Battling Cyclical and Structural Issues** A combination of structural and cyclical pressures makes us cautious in the near term, but we believe valuations are reasonable and business models have been battle-tested and have improved significantly. *Glenn Schorr, CFA* *p. 21*

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This issue of Portfolio Managers' Spotlight covers April 11 through April 16, and is for ***ELECTRONIC DISTRIBUTION ONLY.***

See Disclosures on page 41

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Rating Changes at a Glance (4/11/03-4/16/03)

*For details, see **Rating Change Review***

New Coverage	To	From	Date
Bear Stearns	Neutral 2	-	4/11
Citigroup	Buy 2	Buy 2	4/11
Goldman Sachs	Neutral 2	Neutral 2	4/11
Lehman Brothers	Neutral 2	Neutral 2	4/11
Merrill Lynch	Buy 2	Neutral 2	4/11
Morgan Stanley	Buy 2	Neutral 2	4/11

Upgrades	To	From	Date
US Bancorp	Buy 2	Neutral 2	4/14

Downgrades	To	From	Date
CompuCredit Corp.	Reduce 2	Neutral 2	4/16
Hilton Hotels Corp	Neutral 2	Buy 2	4/15
Marriott International	Neutral 1	Buy 1	4/15
MBNA Corp	Reduce 2	Neutral 2	4/16
Millennium Pharmaceuticals	Neutral 2	Buy 2	4/16
Salix Pharmaceuticals	Neutral 2	Buy 2	4/14
Starwood Hotels & Resorts	Neutral 2	Buy 2	4/15

For ratings definitions, see **Current Price and Footnotes**.

Significant Estimate Revisions (4/11/03-4/16/03)

*For complete listing of changes, see **Estimate Revisions**; for details see **Research Review***

Upward Revisions (4/11/03-4/17/03)

Company	Price 04/17	FY	New	Old	% Ch	Chg. Date
Broadcom Corp		12/03	0.33	0.18	+83.3	4/16
		12/04	0.33	0.30	+10.0	4/16
Cadence Design System Inc.		12/03	0.50	0.45	+11.1	4/16
Ford Motor		12/03	0.55	0.35	+57.1	4/16
		12/04	0.65	0.40	+62.5	4/16
Lam Research		6/03	0.10	0.04	+150.0	4/16
PacifiCare Health Systems		12/03	5.43	4.30	+26.3	4/16
		12/04	6.00	4.94	+21.5	4/16
Powerwave Technologies Inc.		12/03	-0.29	-0.34	+14.7	4/16
W-H Energy Services Inc		12/03	1.10	0.85	+29.4	4/16
		12/04	1.50	1.36	+10.3	4/16

Downward Revisions (4/10/03-4/17/03)

Company	Price 04/17	FY	New	Old	% Ch	Chg. Date
America West Holdings		12/03	-6.10	-3.30	-84.8	4/13
Baker Hughes Inc		9/03	0.95	1.10	-13.6	4/15
Boeing Co		12/03	1.80	2.00	-10.0	4/11
Continental Air		12/03	-6.40	-5.65	-13.3	4/13
HCA Inc		12/03	2.95	3.20	-7.8	4/15
		12/04	3.25	3.69	-11.9	4/15
Lyondell Petrochem		12/03	0.00	0.20	-100.0	4/16
		12/04	2.23	2.52	-11.5	4/16
Martin Marietta Materials Corp		12/03	1.76	2.05	-14.1	4/16
		12/04	2.24	2.50	-10.4	4/16
MGM Mirage		12/03	1.48	1.72	-14.0	4/16
		12/04	1.87	2.05	-8.8	4/16
Millennium Chemicals		12/03	0.35	0.75	-53.3	4/16
		12/04	2.04	2.37	-13.9	4/16
Nassda Corp.		9/03	0.12	0.16	-25.0	4/16
Nextel Partners, Inc.		12/03	-0.58	-0.53	-9.4	4/14
		12/04	-0.01	0.04	-125.0	4/14
		12/05	0.63	0.76	-17.1	4/14
Northwest Airlines		12/03	-11.50	-6.25	-84.0	4/13
Novellus Systems		12/03	0.26	0.40	-35.0	4/14
		12/04	0.75	1.00	-25.0	4/14
Powerwave Technologies Inc.		12/03	-0.34	-0.11	-209.1	4/11
Qualcomm Inc.		9/03	1.19	1.37	-13.1	4/16
		9/04	1.21	1.39	-12.9	4/16
Rowan Companies		12/03	0.20	0.37	-45.9	4/16
Safeway Inc		12/03	2.10	2.40	-12.5	4/16
		12/04	2.15	2.48	-13.3	4/16
Tellabs Inc.		12/03	-0.21	-0.11	-90.9	4/16
		12/04	0.02	0.04	-50.0	4/16

Asset Allocation Model as of 4/17/03

	Balanced account weighting			Equity account weighting			Yield/expected return			Probability of top performance*		
	Current	Last week	01 02 2003	Current	Last week	01 02 2003	Current	Last week	01 02 2003	Current	Last week	01 02 2003
Stocks	89.0 %	89 %	89 %	99.0 %	99.0 %	99 %	8.4 %	8.4 %	8.4 %	97 %	97 %	97 %
Bonds	11.0	11	11				3.9	3.9	4.0	2	2	2
Cash	0.0	0	0	1.0	1	1	1.2	1.1	1.2	1	1	1

Suggested balance account weightings are based upon a portfolio where maximum stock weightings are 100%, minimum 40%, bond weightings are 75% maximum and 10% minimum, and maximum cash weightings are 25%, minimum 0%. Suggested equity account weightings are based upon a portfolio where maximum stock weightings are 100%, minimum 75%, and maximum cash weightings are 25%, minimum 0%. *Probability of top performance corresponds to flexible/Asset Allocation account weighting.

Economic Outlook

Dissonance: Unemployment Rate Versus Payrolls

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ECONOMICS

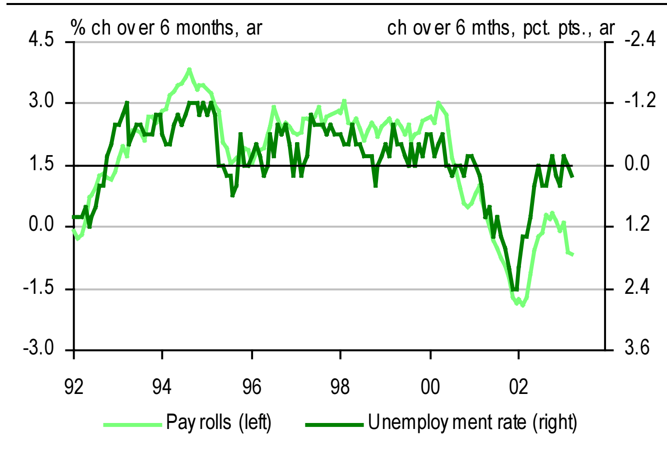
April 17, 2003

The unemployment rate rose sharply in 2001, when the economy was firmly in +recession. It increased to 5.6% on average in the fourth quarter of 2001 from 3.9% in the fourth quarter of 2000. However, since then, it has risen only 0.2 point, to 5.8%, even though payrolls have declined about 700,000 over that span (March 2003 versus the fourth quarter of 2001). Moreover, given the natural tendency for the labor force to grow, even flat payrolls are typically consistent with rising unemployment. Based on a simple regression of the relationship between payrolls and unemployment in the five years through 2001, that 700,000 decline in payrolls would typically be associated with a one point rise in the unemployment rate.

How does one reconcile the data? 1) Is the unemployment rate, which is based on a separate survey from payrolls—the household survey, as distinct from the establishment survey—fundamentally flawed and should be ignored? 2) Is it because discouraged job seekers have given up their job search and the labor force is artificially depressed? 3) Is the unemployment rate sometimes a lagging indicator and is due to rise more in coming months? Or 4) Is the household survey sending the correct signal, and payrolls have overstated weakness?

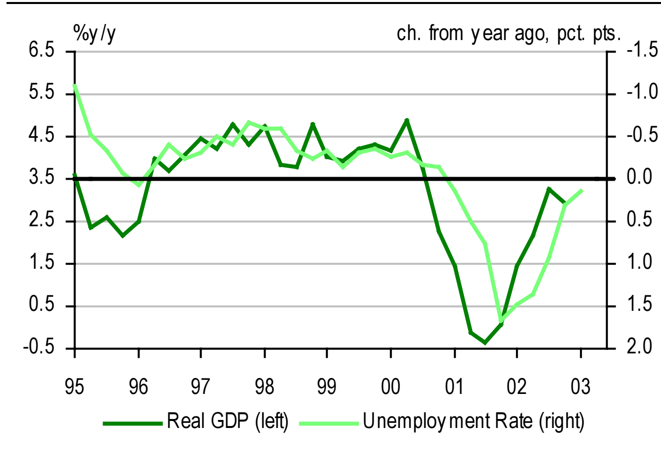
Unfortunately, there is no simple answer, but we believe points 3 and 4 deserve more attention than the first two. In other words, we agree that the current 5.8% figure does not yet fully reflect the weakening in the labor market in early 2003, although we also suspect that the labor market performed better than suggested by payrolls in 2002. The right-hand chart below, showing changes in GDP and changes in unemployment, makes the near-flat unemployment rate in 2002 look credible. We expect the unemployment rate to rise an additional 0.3 percentage point to 6.1% within the next three months. After that, we are counting on the labor market picking up enough to at least stabilize the unemployment rate. We forecast a 6.0% rate at the end of 2003 and 5.7% at the end of 2004.

The unemployment rate has been close to flat since late 2001, a better outcome than seems consistent with lower payrolls.



Source: Bureau of Labor Statistics

But it looks fairly consistent with GDP growth, which has been disappointing for early in a recovery but far from dismal.



Source: Bureau of Labor Statistics and Bureau of Economic Analysis

It would not be unprecedented for the payroll data to overstate weakness initially. For example, in 1992, when the economy was at a somewhat comparable early stage of a recovery, the household survey signaled more strength than the establishment survey, and payrolls were eventually revised up to show an additional 500,000 jobs (see table below). At the time, the payroll survey did not allow for enough net new business formation as the economy emerged from recession. That source of error does not affect the household survey data—the main source of error for the household survey beyond routine month-to-month sampling error is in the population assumptions, where errors are less likely to suddenly accumulate in a single year. Of course, as can be seen from the table, it is also true that payrolls tend to swing up and down more from year to year, and sizable differences can persist between the two surveys even after final revisions.

As for the labor force participation rate, it declined to 66.2% from 66.8% at the end of 2001. If it remained at 66.8%, and employment was exactly as now reported (so the extra participation showed up entirely in unemployment), then the unemployment rate would now be 6.6% instead of 5.8%. That would be an overly simplistic way to analyze the data, however. The participation rate is fairly cyclical, typically dropping below trend when the labor market is subpar. And while the cyclical falloff has been at least partly offset in most previous slowdowns by a secular uptrend, the secular trend looks closer to flat over the past decade, reflecting an aging population and an already historically high female participation rate. We will return to some issues relating to the participation rate later in this article.

Much more notable than the modest decline in the overall participation rate has been the strength in employment in the household survey used to calculate the unemployment rate relative to payrolls in the establishment survey. As noted above, payrolls have declined by about 700,000 since the fourth quarter of 2001.

Employment Statistics (change, millions; Q4/Q4, unless noted)

	Employment, nonfarm payrolls		Employment, household survey				Labor force	Unemployment rate
	Original data*	Latest revised data	Total	Wage & salary Workers	Self-employed	Farm Workers		(pct. pt. ch.)
1990	1.0	0.6	0.6	0.4	0.2	0.1	1.6	0.8
1991	-0.9	-1.0	-0.7	-0.7	0.1	0.0	0.6	1.0
1992	0.5	1.0	1.2	1.4	-0.2	0.0	1.7	0.3
1993	1.9	2.7	2.3	2.1	0.3	-0.1	1.4	-0.7
1994	3.4	3.8	3.3	3.0	-0.1	0.4	2.1	-1.0
1995	1.9	2.4	0.8	1.0	0.0	-0.2	0.8	-0.1
1996	2.6	2.7	2.6	2.4	0.1	0.1	2.4	-0.2
1997	3.0	3.3	2.7	2.9	-0.1	0.0	1.9	-0.7
1998	2.9	3.0	1.8	1.8	0.0	0.0	1.5	-0.2
1999	2.7	3.1	2.0	2.3	-0.2	-0.1	1.6	-0.3
2000	2.1	2.1	1.4	1.6	-0.2	-0.1	1.2	-0.1
2001	-0.8	-1.1	-1.1	-0.9	-0.1	-0.1	1.2	1.7
2002	-0.3		0.4	0.1	0.3	0.1	1.0	0.3
2003 to date**	-0.4		0.1	0.5	-0.1	-0.2	0.2	-0.1

* Based on Monthly Labor Review archives (data reported as of February of the following year).
** March 2003 versus 02Q4 average; household survey data have been adjusted to allow for new population assumptions in January 2003.
Source: Bureau of Labor Statistics

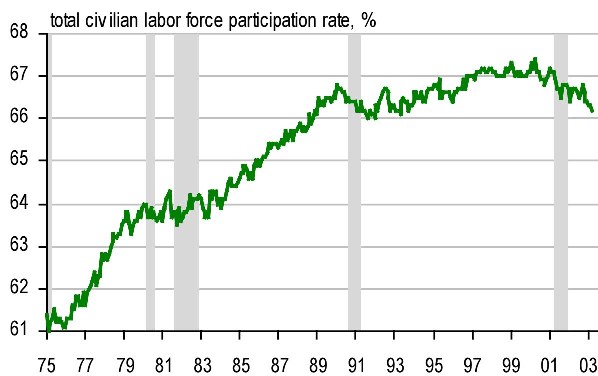
Employment in the household survey has risen 500,000 over that span, even after adjusting for a January 2003 surge caused by new population assumptions (1.1 million without the adjustment). As can be seen in the table above, almost half of the gap has opened up since the fourth quarter of 2002. Some of that part, in particular, could quickly disappear with a correction in the household survey in the next few months. Of course, it is also possible that the plunge in payrolls in the last two months has been exaggerated.

Sometimes, the gap between the two employment measures can be explained by the broader coverage of the household survey data, most notably the inclusion of the self-employed and farm workers. Indeed, in some cases, laid-off individuals become self-employed "consultants." But the different coverage has not been a major factor, as the payrolls-comparable nonfarm wage and salary worker component of the household employment measure is up around 600,000 since the fourth quarter of 2001 (after adjusting for the surge caused by new population assumptions in January 2003).

Another candidate for accounting for the difference between the two employment measures is the treatment of second jobs. Since an individual is only counted once in the household survey but can be counted more than once in the payroll survey, a decline in the number of individuals holding second jobs would depress employment in the establishment survey relative to the household survey. But the data on multiple job holdings show a net rise since late 2001.

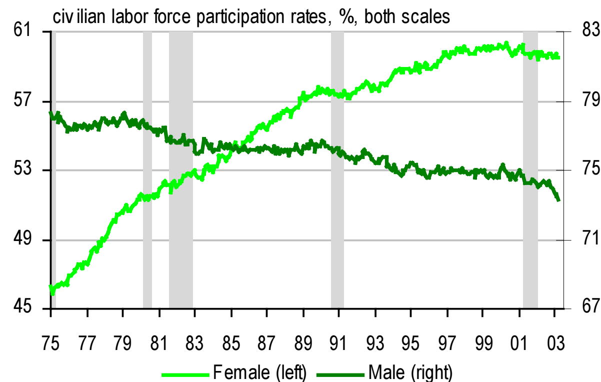
None of this is to suggest that the labor market has been strong. Even the household survey measure of employment has been weak, with growth averaging a mere 0.3% at an annual rate since the fourth quarter of 2001. Nor do we deny that there has been some additional weakening in recent months as geopolitical tensions rose—and that weakening has yet to be reflected in the especially volatile household survey employment measure. But the household survey data suggest that the labor market has performed better than payrolls alone have indicated. Similarly, although GDP growth has fallen well short of a typical early-expansion pace, it has been far from dismal. Real GDP rose 2.9% during 2002 (Q4/Q4), a pace usually consistent with no more than a slight rise in the unemployment rate.

The labor force participation rate did not decline during the 1980s' recessions, but it slowed relative to a secular uptrend.



Note: Shaded bars denote recessions Source: Bureau of Labor Statistics

The secular trend is probably flat at best now, reflecting an aging population and stabilization in the female rate.



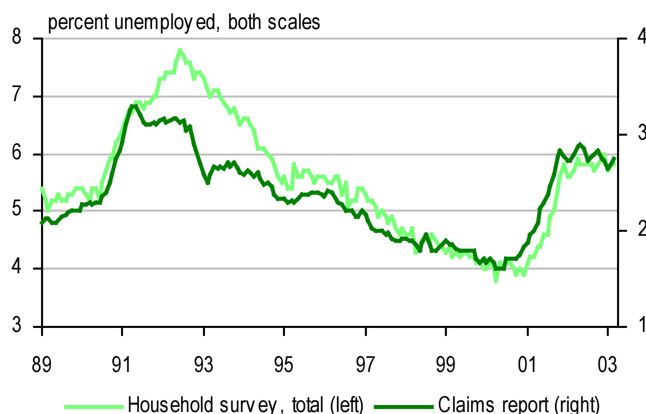
Note: Shaded bars denote recessions Source: Bureau of Labor Statistics

One independent cross-check for the unemployment rate is the insured unemployment rate in the weekly jobless claims report. It is corroborating the lack of any significant further rise in the overall unemployment rate over the past year. True, the insured rate has risen in recent months, but only modestly: to 2.8% from 2.6% in January 2003. That just puts it back to where it was in the fourth quarter of 2001.

The insured unemployment rate is merely a subset of the overall unemployment rate, as it only includes individuals receiving regular unemployment benefits. It does not include individuals who have exhausted their eligibility for receiving benefits. Nor does it include those individuals receiving benefits in the special extended federal program. As a result, a flat or even declining insured rate does not preclude a continued uptrend in the overall unemployment rate. Indeed, in the early 1990s, the insured rate peaked in mid-1991, yet the overall unemployment rate continued to climb until mid-1992 (see chart below). Individuals were losing their eligibility for regular benefits before finding a job.

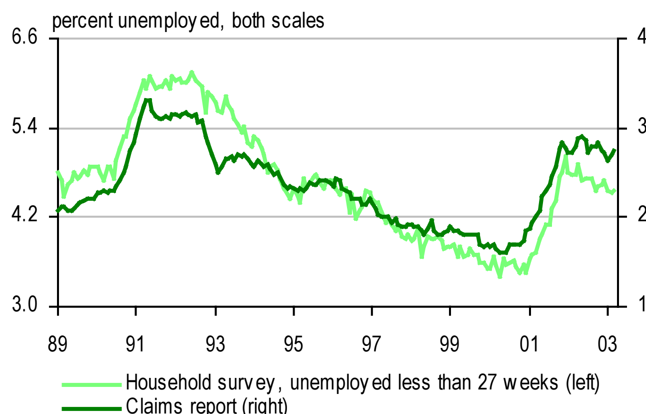
Eligibility for regular unemployment benefits typically expires after 26 weeks of payments. Meanwhile, the household survey includes detail on individuals by duration of unemployment. So, we calculated an unemployment rate based on individuals who have been unemployed for no more than 26 weeks and plotted it against the insured rate in the claims report. The chart is shown below, to the right of the chart showing the insured rate versus the overall unemployment rate. As can be seen, the turning points for the two series are typically closely aligned. In short, it corroborates the near flat pattern in the unemployment rate.

The flattening in the insured unemployment rate does not necessarily corroborate the flattening in the overall unemployment rate—it didn't in 1991-92. Eligibility for regular unemployment benefits typically expires after 26 weeks.



Source: Department of Labor

But it does tend to corroborate the pattern in the short-duration unemployment rate.



Source: Department of Labor

The next chart below is one we feature frequently. It plots the unemployment rate against the labor market-related parts of the Conference Board's consumer confidence survey. The message is that the labor market is widely perceived to be weaker than suggested by the unemployment rate alone. The question then is: why?

One possibility would be that the official unemployment rate is understated because individuals have become discouraged and have given up trying to find jobs. However, even the more broadly defined "pool of available workers" unemployment measure, which includes individuals who have dropped out of the official labor force (not having actively searched for jobs in the previous four weeks) but who say they want jobs, has been close to flat as well. It did jump to 8.9% from 8.6% in the latest monthly report, but that still left it up just 0.3 point since the fourth quarter of 2001 (when it was 8.6%).

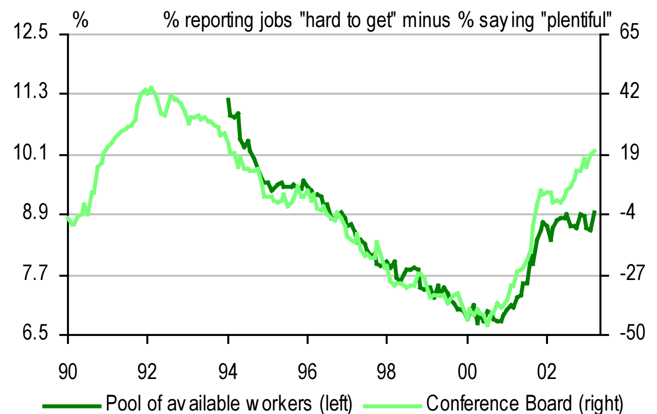
As noted earlier, it is true that the labor force participation rate has declined to 66.2% from 66.8% at the end of 2001. But the participation rate is highly cyclical, typically dropping below trend when the labor market is subpar and vice versa. And while the cyclical falloff has been at least partly offset in most previous slowdowns by a secular uptrend, the secular trend looks closer to flat recently, reflecting an aging population and an already historically high female participation rate.

The charts below show the participation rate according to various age categories. As can be seen, the steepest dropoff recently has been in the 16-19 and 20-24 year-old age categories. The pattern is consistent with more young people opting to stay in school until job opportunities improve. In contrast, the participation rates for older individuals have been rising. In part, the pattern reflects better healthcare and longer life expectancy, but it probably also reflects a postponement of retirement because of the plunge in the stock market over the past three years. As an aside, since older workers tend to earn more than younger workers, this pattern is positive for overall labor income.

Perceptions of labor market are weaker than reported unemployment rate.

Source: Bureau of Labor Statistics and Conference Board

That observation also applies to the broader "pool of available workers" calculation.

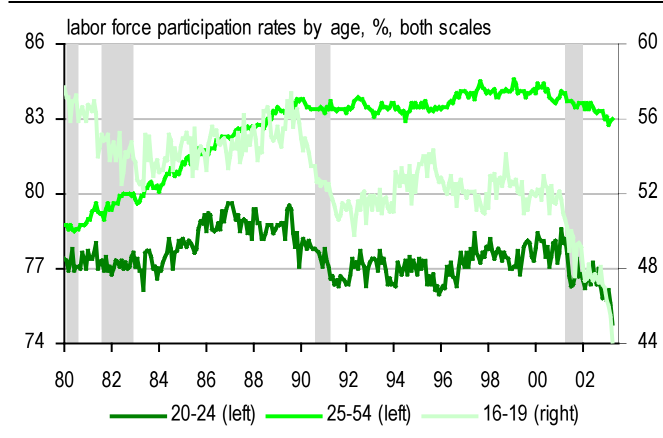


Source: Bureau of Labor Statistics and Conference Board

Although participation rates for workers over age 55 have been rising, the levels remain well below those for workers in the 20-24 and 25-54 categories. As a result, the ongoing aging of the population should result in a decline in the average participation rate in coming years. Of course, such aging occurs very gradually. It does not play a significant role in any short-term analysis of what has been happening in labor markets.

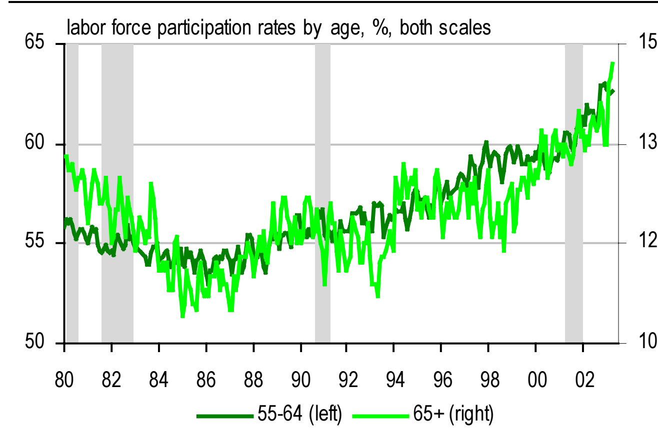
In conclusion, there is no single explanation for why the unemployment rate has risen less than one might have expected based on the payroll data alone. The issue is not as simple as one survey being "right" and the other "wrong." In our opinion, though, the "truth" is probably somewhere in the middle. Given the clear weakening in the economy in recent months, we believe the unemployment rate is overdue to rise by at least a couple tenths of a percentage point in the next few months. At the same time, unemployment and payrolls have been dissonant enough for long enough now to raise suspicion that the weakness in payrolls since early 2002 has been overstated, especially since consumer spending has proven to be more resilient than widely feared. We forecast a rise in the unemployment rate to 6.1% within the next three months, a level that is still not high by past standards. After that, we are counting on the labor market picking up enough to at least stabilize the unemployment rate. We forecast a 6.0% rate at the end of 2003 and 5.7% at the end of 2004.

The largest decline in labor force participation recently has been among 16-19 year olds and 20-24 year olds, with increased schooling likely becoming even more appealing in a sluggish job market.



Note: Shaded bars denote recessions
Source: Bureau of Labor Statistics

The participation rate for older individuals has been rising, likely reflecting a combination of longer life expectancy and, recently, investment losses.



Note: Shaded bars denote recessions
Source: Bureau of Labor Statistics

Appendix: Household and Establishment Surveys

Here is a bit more background information on the two separate employment surveys. For even more detail, please see our *Data Decoder: An Investor's Guide to the U.S. Economy*, published in April 2002.

For *the household survey*, the BLS samples individual households and extrapolates the data based on the latest population assumptions. The survey excludes institutionalized individuals (such as in prisons) and military personnel. It features scores of detailed questions, with the most basic being whether individuals in each household who are at least 16 years of age are currently employed, not employed but actively searching for jobs, or not employed and not actively searching for jobs. Individuals are officially counted as unemployed only if they say they are actively searching for jobs, as indicated by having actively searched in the previous four weeks. The labor force is defined as the sum of individuals employed and individuals not employed but actively searching for jobs. The unemployment rate is the number of individuals who are officially unemployed as a percentage of the labor force. For example, if the total civilian noninstitutional population aged 16 years or more is 200 million, with 135 million employed, 15 million unemployed (and actively searching for jobs), and the other 50 million not employed and not actively searching for jobs, the labor force will total 150 million and the unemployment rate will be 10%.

For the *establishment survey*, the BLS samples employers, including businesses and government agencies. The government data include civilian Department of Defence personnel, but not military personnel. Establishments in the sample are asked to provide a monthly tally of employees, from which the BLS extrapolates a total for the economy as a whole.

Differences. There are numerous conceptual differences between employment in the two surveys. For example, the establishment survey counts jobs, while the household survey counts individuals employed. As a result, if a person with two jobs loses one job, employment in the establishment survey will decline but there will be no change in the household survey. Also, unlike the establishment survey, the household survey includes farm workers and the self-employed.

The household survey is based on about 60,000 households each month. The establishment survey includes more than 300,000 establishments employing about 37 million people. The establishment survey's much larger size makes its measure of employment much less volatile from month to month, although not necessarily more accurate over longer time periods.

The payroll data are revised regularly to reflect more complete information. In particular, fairly complete information on employment is obtained with a long lag from the administrative records of the unemployment insurance program. In contrast, except for the seasonal factors, the household survey is generally not revised. The household data are periodically adjusted to reflect new population assumptions from the point of the adjustment forward, however.

Spotlight On. . .

Are the Bells Growing Less Profitable?

(This is a Q-Series™ report)

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WIRELINE SERVICES

April 16, 2003

Summary

- After years of anticipation by Bell bears, margin pressure should, in our view, become the hallmark of results within the domestic telecom units of the leading carriers beginning in 2003. Driven largely by increased pension expenses in the early years, margin pressure should increasingly result from a shift from high-margin revenues of monopoly-like services to lower-margin revenues won in competitive markets.

- Not satisfied with the level of detail provided by the carriers in their quarterly reports, we used the FCC's Automated Reporting Management Information System (ARMIS) annual data to pinpoint the reasons behind lower profitability while providing an analysis of each of the three Bells' cost structure to enable investors to better understand which carriers are most at risk. Upon completing this analysis, we have lowered our outlook for Bell profitability for 2004 and beyond.

Action and Valuation

- In our preview, we laid out our expectations for improving top-line results at the Bells, driven by declining line loss and improving metrics of growth initiatives. Despite this, we are keeping our Neutral 1 ratings on the Bells as the top-line only tells part of the story.

- We believe "core" wireline margins will decline in 2004 versus 2003. Therefore, we lowered our core wireline margins by 70 bp for Verizon, 160 bp for SBC, and 170 bp for BellSouth in 2004. As a result, we reduced our 2004 EPS estimate for Verizon to $2.56 from $2.62. SBC's EPS estimate came down to $1.32 from $1.37 while BellSouth's EPS estimate fell to $1.74 from $1.80. After the first quarter results are released, 2004 estimates will increasingly be relied upon for forward-looking multiples.

- Based on our revised 2004 EPS estimates, SBC trades at 16.1 times forward earnings with Verizon at 13.6 times and BellSouth at 13.2 times. With consensus S&P estimates for 2004 earnings at $55.60 per share, this implies a market multiple of 15.9 times. Correspondingly, Verizon and BellSouth trade at 14% and 17% discounts, respectively, while SBC earns a premium to the market.

- We maintain our 12-month target prices of $36 per share for Verizon, $22 per share for SBC, and $22 per share for BellSouth based on our long-term models and DCF analyses. We use discount rates of 6.9% for SBC, 6.8% for BellSouth, and 7.8% for Verizon and imply a 2% free cash flow in perpetuity.

Signs of Pressure

We believe margins are the most difficult piece of the earnings puzzle to decipher and the fourth quarter provided few clues regarding near-term trends. We expect margin pressure to mainly be driven by increased pension expenses as the hangover from the telecom and technology bubble kicks in. Respectively, Verizon, BellSouth, and SBC posted $1.4 billion, $314 million, and $74 million in pension and post-retirement benefit income in 2002, equating to 16.7%, 8.2%, and 1.0% of net income for each of the carriers, respectively. This income boosted wireline EBITDA margins by 180 bp for the group in 2002. Netting out these effects brings the core profitability more into focus. For instance, core EBITDA margins for SBC and Verizon in 2002 are much closer at 39.9% and 41.7% versus the 40.1% and 45.2% posted on a reported basis, respectively. While still the highest, BellSouth's wireline EBITDA margin for 2002 comes down on a core basis at 47.4% versus 49.1% on a reported basis.

In 2003, we expect reported wireline EBITDA margins for the Bells to decline 440 bp to 39.5% and another 190 bp to 37.6% in 2004. We estimate that the increase in pension expense will contribute to roughly 370 bp of the decline in 2003 and 150 bp in 2004. Signs of this should become obvious with first quarter 2003 results with average Bell EBITDA margins falling to 40.1% on a reported basis versus 44.7% a year ago. The increase in pension expenses should contribute roughly 84% of this decline in 2003 and 80% of the decline in first quarter 2003 alone.

Growing Less Profitable

Now that we have stripped away the noncash effects of pension accounting, we focus on the longer-term factors affecting the profitability. The Bells have historically enjoyed 45-50% EBITDA margins in their wireline businesses, offering traditional voice and data services. We believe these high margin services will increasingly see pressure from intersegment (from local voice into long distance voice or data) and intra-segments (within local, long distance, or data segments) shifts in revenues.

Over the last two years, the only growing segment of local voice revenues was the wholesale business. In 2002, we estimate that the decline in switched access lines contributed to roughly 67% of the decline in local voice revenues and the remainder came from declining network access revenues. Local voice revenues declined by $3.9 billion in 2002 and we expect it to decline by another $4.2 billion in 2003. We believe roughly $1.8 billion of that decline will be because of the continued loss in primary residential retail lines, $1.5 billion because of the declining switched access revenues, and $1.1 billion because of the decline in retail business lines.

Intersegment Shifts

The first and most obvious mix shift in revenues is the decline in high-margin local voice revenues and growth in low-margin competitive services such as DSL, interLATA long distance voice, and IP services. From a margin standpoint, there is nothing like the good old local service business, in our view. As a regulated monopoly, an incumbent carrier had virtually no marketing

expense related to the basic local voice service and enjoyed low churn along with low customer service costs. The proprietary nature of the network also made the incumbent the sole source provider of vertical calling features such as call waiting, caller ID, and conference calling, all of which produce high, software-sized margins. However, the landscape has changed. New competitive threats have emerged and local voice revenues appear to have begun a decline.

Local voice, including network access revenues, still represents the largest part of wireline revenues, however its share has been dropping consistently every quarter. We estimate that local voice revenues represented roughly 70% of the Bells' wireline revenues in the beginning of 2000 and dropped to 64% of the total at the end of 2002. We expect the local voice mix to drop to 59% of the total by year-end 2005 as long distance voice and data become a larger part of the mix. The Bells posted a 6.0% decline in local voice revenues and we estimate an average of 5% annual decline for the next three years. We note that our models do not currently include the potential effects of large-scale cable telephony competition, which would likely double the rate of decline and increase the margin impact on wireline operations.

Falling Local Voice Revenues

Total residential lines have been dropping significantly because of second line losses and technology substitution. The Bells lost 3.6 million total residential access lines in 2002 versus 3.0 million in 2001 and we expect another 3.0 million lines lost in 2003. The decline in the second lines accounted for 56% of net residential access line losses in 2002 versus 31% in 2001. We estimate that the Bells lost roughly $260 million in revenues in 2002 driven by declining second lines, which contributed to roughly 7% of the decline in local voice revenues. We believe the Bells collect roughly $13-16 per second line per month, lower than the average of $20-22 per primary residential line because of the lack of calling features. In an effort to respond to wireless and cable modem competition, we expect the Bells to announce significant reductions in second access line rates. We believe the Bells will be willing to lower the monthly rates per second line down to as low as $5.00 per line to maintain line counts and head off competition from IP-based services.

Local → Long Distance

The Bells are progressively entering the retail long distance business, allowing them to collect retail long distance revenues from each long distance customer they sign up. However, they forego access revenues they collect from the inter-exchange carrier. While the revenue per subscriber may be higher, this shift from high-margin access revenues to low-margin long distance revenues is yet another pressure on profitability. The Bells will now have to increase their marketing dollars, pay up for churn, and add wholesale long distance transport (in the near term) to their cost of service.

We look at the mix of network access minutes of use to gauge the impact on switched access revenues. We estimate that long distance minutes, generated from the Bells' own long distance subscribers, represented roughly 12% of the total minutes versus 7% in 2001. As the Bells continue to penetrate the long distance market, more and more minutes will be priced at the retail level as

opposed to the access charges collected from the inter-exchange carriers. We estimate that the Bells' long distance subscribers will generate roughly 19% of the total switched minutes in 2003 and 28% in 2004.

Local → Data

Based on FCC data, long distance minutes declined 5% in 2001 largely because of substitution from data and wireless service offerings. In 2002, AT&T suggested that residential long distance minutes declined by the midteens. While this shift is more visible for the inter-exchange carriers, the Bells also see an impact in lower high-margin, switched access revenues. The Bells may recapture some of the access revenue lost in retail data revenues as the customers shift more and more long distance minutes to dial-up Internet or DSL accounts. The Bells can also capture some of the switched access revenue lost in special access as they provide transport to wireless carriers. For example, SBC collected roughly $114 million in long distance revenues from Cingular in 2002.

The Bells' local revenues also decline as more business customers switch their ISDN or switched business lines to dedicated access lines. Total business lines declined 4.7% in 2002 versus a 1.6% decline in 2001. While the majority of the 2.7 million business lines lost in 2002 were because of the weak economy, we believe the shift toward special access lines exacerbated the decline. Over the last three years, total switched access lines declined by roughly 3.5% per year while special access lines grew by roughly 30% per year. We estimate that declining business lines caused the Bells to lose roughly $1.3 billion in revenues in 2002, accounting for roughly 34% of the decline in local voice revenues.

Intra-Segment Shifts

Local

Local service itself is losing its luster because of the rapid shift of the access line base from retail to wholesale, highlighting the high fixed costs and negative leverage of the local exchange. While we believe we have reached the trough in total switched access line declines, we are not enthusiastic about the improvement yet as we believe the main problem lies in retail access line declines. Retail and total switched access lines began to diverge since the beginning of 2002, as wholesale lines started to become a larger part of the total access lines because of increased pressure from UNE-P-based competitors. As stated previously, we do not believe UNE-P lines, on a weighted-average basis, are profitable at the EBITDA line for the Bells. As of year-end 2002, wholesale lines represented roughly 8% of the Bells' total switched access lines and are expected to grow to 12% of the base in 2003 and to almost 17% in 2005. Put differently, roughly 12% of Bells' access lines in service at year-end 2003 are not expected to be profitable.

The retail line base itself is also getting less profitable as UNE-P-based competitors focus on high-ARPU residential customers. We believe the Bells' retail residential base is highly stratified with the top quartile of customers generating the majority of the profits in the residential market.

The Bells also lose network access revenue generated from a line when it is lost to a UNE-P-based competitor. This includes the loss of the SLC and a reduction in minutes of use. The Bells reported a 7.3% decline in total network access minutes of use in 2002 versus just a 0.9% decline in 2001. We estimate that roughly 24% of the decline in network access minutes of use is attributable to UNE-P lines lost in 2002. For 2003, we expect minutes of use to fall 6.9% with more than 45% of the decline driven by the shift to UNE-P lines.

Long Distance

Profitability is also declining in the long distance business as interLATA revenues rise while intraLATA revenues fall. InterLATA long distance revenues made up roughly 28% of the total toll revenues in 2002 and are expected to increase to 61% of the mix by 2005. While we acknowledge that the distinction between intra- and interLATA toll calling will blur as the Bells focus on bundling efforts, the difference in profitability should persist.

We estimate that the Bells generate roughly $0.05 per minute in intraLATA long distance (toll) revenues and an average of $0.10 per minute in interLATA long distance revenues. Despite the lower ARPU, we believe the intraLATA long distance is a higher-margin business as the Bells only incur the cost of additional interoffice transport on its own facilities to complete a call. Additionally, the Bells do not spend incremental marketing dollars to attract intraLATA toll subscribers, as it is considered a natural enhancement of the local calling area. The Bells purchase wholesale long distance minutes from inter-exchange carriers and resell them in the provision of interLATA long distance. Per-minute access charges need to be paid to terminate interLATA minutes out of region. Moreover, there are significant marketing and advertising costs associated with the long distance business along with the cost of churn.

Data

The Bells generated roughly 22% of their wireline revenues from data services. While we believe data will remain one of the growing parts of the wireline revenues and represent roughly 25% of the mix by 2005, we also note that several moving parts within this segment will put pressure on the total profitability. Overall, data revenues continue to feel the pressure of falling demand for data services from corporations and wholesale customers. In fact, BellSouth and SBC saw data revenues fall 3-4% in the fourth quarter of 2002 while Verizon posted a 5% growth.

- **Private line → enterprise data services.** The majority of the Bells' data revenues today come from private line services that typically generate high margins. These services require little ongoing customer service, have little associated churn, and require practically no marketing as the Bells are often the sole service providers on many routes. Most of the Bells' data revenues are accounted for in the special access revenues. The Bells' special access revenues grew 7% to $11.2 billion in 2002 and represented roughly 37% of the total network access revenues. While Verizon posted the highest annual growth in special access revenues at 13% in 2002 versus 10% growth at BellSouth, SBC reported a 1% decline. We believe special access is a highly lucrative business for the Bells, generating 50-60% in EBITDA margins.

- Separately, SBC and Verizon have recently announced national data network expansion plans in an effort to increase their presence in the enterprise segment. We believe it will take at least a number of years for the Bells to gain the expertise and to develop the product sets in order to successfully compete in this market. We also note that the economics of serving the enterprise data market is not as favorable as the local business and the increased competition will only exacerbate the problem. To illustrate, AT&T, with more than $1.5 billion in IP revenues, only recently reached breakeven in the EBITDA line.

- **DSL is becoming a larger part of data revenues.** We estimate DSL revenue represented roughly 10% of the Bell data revenues in 2002 and expect the mix to increase to 17% by the end of 2005. We estimate that SBC generated $830 million in DSL revenues in 2002, followed by $760 million at Verizon and roughly $490 million at BellSouth. We expect DSL revenues to almost double for the Bells by 2005, while total data revenues should grow by an average of roughly 3% per year. We estimate that DSL revenue represented roughly 10% of the Bell data revenue stream in 2002 and we expect it to go to 17% by the end of 2005. We believe data service margins will continue to fall as DSL grows as a percent of the total data revenues. The residential high-speed data is a very competitive business with high ongoing customer support cost, churn, and marketing expenses. Only BellSouth suggests that its DSL operations are producing positive EBITDA. SBC management has stated that it expects to reach breakeven in DSL in the first quarter of 2004 while Verizon projects to breakeven at the end of 2004, after securing 3M subscribers.

Dissecting the Cost Structure

In an effort to better understand and compare the Bells' cost structures, we dug into the annual ARMIS data filed with the FCC. These data provide a detailed study of the Bells' expenses as opposed to the single operations and support expense line provided by the Bells. Coincidentally, each of the Bells intends to provide more data regarding its cost structure in first quarter 2003. This change in reporting leads us to believe we may be on to something with this margin study. We recall that the Bells gave more data on line loss once it became apparent that traditional trends were worsening.

The ARMIS data go much further than the Bells will go in providing detail regarding their costs. With the ARMIS data, we capture roughly 90% of the wireline revenues and 95% of the wireline EBITDA provided by the Bells. The variance is because of non-GAAP treatment of allocated depreciation cost within ARMIS and the fact that ARMIS only includes the regulated portion of a company and not the nonregulated subsidiaries. These are retail and wholesale Internet units for SBC, the long distance unit (except for toll) for Verizon, and BellSouth. BellSouth's ARMIS data also excludes the pay phone and the CPE subsidiaries. In addition, we note that the ARMIS data is not normalized for nonrecurring items.

In 2002, cost of services (encompassing plant-specific and network operations and access) represented 34% of sales for SBC, 27% for Verizon, and 26% for BellSouth. SG&A expense represented 25% of sales for SBC and Verizon and 21% of sales for BellSouth. All three carriers show falling margins increases in SG&A driven largely by pension expenses while increases in the cost of service as a percentage for SBC and BellSouth—the two carriers that have seen the largest pressure on revenues—attests to the fixed cost nature of these businesses.

Cost of Services

The major differences among the Bells' cost structures appear within the cost of service line, which also represents the majority of their operating expenses. Cost of services is composed of plant-specific operations, network operations, and access. The three Bells spent roughly $26 billion on cost of services in 2002, a 3.4% reduction over 2001. Over the last two years, the group took roughly $1.5 billion out of the cost of services line in response to the $5.5 billion reduction in wireline revenues.

Going back, the Bells started the 1990s with similar gross margins running at roughly 70-71% of sales. Over the last 10 years, BellSouth has been the best performer of the group, improving gross margins to as high as 77.6% in 2000. While margins have gradually declined to 74.1% of sales in 2000, BellSouth still has the lowest cost of service as a percentage of sales. Verizon, however, has been narrowing the gap, boosting gross margins by 270 bp in two years to 73.0% of sales by slashing the cost of services by 7.7% in 2002 following a 9.5% decline in 2001. This was during a time when BellSouth and SBC saw significant declines. For SBC, gross margins have declined consistently since 1996 to their lowest level of 65.8% in 2002. Despite having lower wireline revenues than Verizon, SBC is actually incurring more on cost of services in dollars spent.

Over the last three years (1999-2002), Verizon lowered cost of service by 4.8% annually versus a 2.7% annual decline in wireline revenues. BellSouth and SBC, however, posted a respective 5.3% and 2.3% annual expense growth over the same period versus roughly flat revenues. Similarly, Verizon improved its cost per average switched access line to $14.0 per month in 2002 versus its peak of $17.5 per month in the early 1990s. While BellSouth reduced its cost per line to as low as $13.1 per month in 2000, the company could not sustain this level and saw these expenses grow back to levels of the early 1990s. SBC has had the highest cost per access line for the past three years despite having had the lowest in the early 1990s.

Roughly 65-70% of the cost of services is comprised of expenses related to cable and wire, network operations, and general support. Cable and wire expense represented roughly 6.5-7.1% of sales since 1990 and came in at 6.6% of sales in 2002, close to its historical low. Network operations represented 5.9-8.3% of sales since 1990 and were 6.1% of sales in 2002, again close to the historical low. Lastly, general support expense has been roughly 4.8-6.3% of sales since 1990 coming in at 5.8% of sales in 2002, suggesting there may be more cuts in that segment.

Key Differences Among the Bells

General support expenses, including land, building, furniture, artworks, office equipment, and general-purpose computers, make up the largest piece of SBC's cost of services at 24%. Verizon and BellSouth, however, spend roughly 17% and 12% of the total cost of service on this line, respectively. In fact, SBC spent roughly 8.4% of its wireline sales on general support versus 4.7% for Verizon and 3.1% for BellSouth. Historically, SBC had been spending a comparable amount with its peer group on general support. Interestingly, the jump of the last few years came from Pacific Bell and Southwestern Bell territories as general support expense doubled over the last three years. We expect the Bells to continue to make progress in cost cutting in this category and believe general support can go down to as much as 3-5% of sales. To elaborate, lowering general support to 5% of sales will result in more than a $1 billion in savings for SBC.

Network operations include expenses related to power, plant and network administration, testing, and engineering. This line of expense represents 25% of BellSouth's total cost of service versus 20% of the mix for SBC and Verizon. That said, Verizon has the best cost structure in network operations as it spends only 5.4% of sales in this category versus 6.7% for SBC and 6.5% for BellSouth. Verizon lowered network operations expense by an average of 5.2% per year over the last three years versus a 0.9% per decline for SBC and 6.8% per year growth for BellSouth. Historically, network operations have been running at roughly 8-9% of sales. We believe BellSouth should focus on this area to help support its margins.

Expenses related to cable and wire make up the largest piece of cost of service for Verizon and BellSouth, at 25% and 26% of the mix, respectively. SBC spends 20% of the mix on cable and wire. The Bells spend roughly 6-7% of their sales on cable and wire expense and this percentage has been very stable over the last 12 years. More than half of this expense category is related to aerial cable. Unless the Bells experience a significant deterioration in the total of their switched access lines, we do not believe the companies can cut much cost on this line.

Selling, General, and Administrative Expenses (SG&A)

Despite the $5.5 billion in reduction in wireline revenues over the last two years, SG&A expense at the three pure-play Bells actually increased by $2.8 billion. The three carriers spent $21.4 billion on SG&A expense in 2002, 11% more than in 2001. This equates to 24.4% of sales in 2002 versus 20.8% in 2001. Almost all of the increase came from higher general and administrative costs. While we believe the high percentage of layoffs last year should enable the carriers to cut cost in this area, we expect the increase in selling expense to partially offset the impact.

Selling expense, which is composed of marketing and service expense, represented just 12.7% of sales in 2002 for the three Bells. Within this segment product advertising was only 0.3% of revenues and sales expense just 2.3% of revenues. We believe the Bells will have to increase their spending on these categories in order to increase their share in the new growth areas (e.g., long distance and enterprise data market). As a point of reference, the national wireless carriers spend roughly 4-5% of total sales on advertising expense while long distance carriers spend 2-3%.

The three Bells line up in a tight range in terms of SG&A expense as percentage of sales, with SBC at the low end at 24.8% and BellSouth at the high end at 25.9% of sales. This is similar to the level of spending in the early 1990s when they had limited competition in their local business and had not entered competitive new markets. As a result, we believe increased spending in SG&A is unavoidable over the next couple of years.

Selling expense makes up roughly 52% of the total SG&A expense for the Bells. Selling expense includes service, sales, product management, and advertising. The main component of selling expense is service cost, which includes call completion, number, and customer service. This category represented roughly 8.7% of sales in 2002, close to its historical range of 8.3-10.7% of sales. The Bells reduced service expense by an average of 2.5% per year for the last two years. Marketing expense constituted roughly 16% of the SG&A expense and represented only 4.0% of sales in 2002, in line with the historical range of 3.2-4.9% of sales. Corporate operations or general and administrative expenses represented 11.7% of sales in 2002 at the high end of its historical range of 6.7-12.5% of sales.

Key Differences Among the Bells

The largest variance is within Verizon's spending on corporate operations representing 14.8% of its sales in 2002. This category consists of executive, planning, general, and administrative expenses. This is the highest percentage of sales for the company and compares to an historical range of 6.7-13.1% of sales. The company's spending in this category is almost 70% higher than SBC despite only having 10% higher revenues. This category represents 58% of Verizon's SG&A expense versus 41% for SBC and 36% for BellSouth. We believe this is a potentially lucrative area for Verizon to cut costs. A reduction in corporate operations expense to 10% of sales will result in more than $1.5 billion in annual savings for the company.

In contrast, Verizon allocated only 7% of its SG&A expense to cost related to sales in 2002 versus 12% for both BellSouth and SBC. Similarly, sales expense represented only 1.7% of sales for Verizon versus 2.9% for SBC and 2.7% for BellSouth. In dollars, Verizon spent roughly $619 million on sales, 36% less than SBC. While Verizon did not announce a similar sales expansion plan like SBC, we believe the company will have to incur additional sales costs to effectively compete within the enterprise data market. SBC's guidance for its new sales amounted to a $325 million annual increase in expenses. Increasing sales cost to 3.0% of revenues will result in roughly $500 million in additional expense for Verizon.

SBC and BellSouth allocate roughly 40% and 44% of their SG&A expenses to service cost and this line represents 10.1% and 9.4% of sales, respectively. For Verizon, however, service cost is only 7.2% of sales, the lowest level for the company since 1990. We believe it is getting harder for Verizon to cut costs on this line while SBC and BellSouth could reduce service cost by $350 million and $170 million, respectively, if they make 100 bp of margin improvement.

Workforce Reductions

We believe "employees per 10,000 access lines" is a good proxy to analyze the productivity of the Bells. Based on ARMIS data, the Bells have almost doubled the productivity level over the last 10 years. Verizon has the lowest number of employees per 10,000 access lines at 20.4 versus 23.1 for BellSouth and 24.0 for SBC. As a point of reference, the European telcos run at roughly 32.7 employees per 10,000 access lines.

While we believe the Bells have made significant progress in driving workforce reduction in the last couple of years and should benefit from these efficiencies in the first half of 2003, we can not assume that they can continue to cut jobs as aggressively going forward. Verizon cut 38,500 jobs or 25% of its workforce in the last two years. SBC and BellSouth reduced their workforce by 13% over the same period, cutting more than 18,000 and 8,100 jobs, respectively.

Capital Expenditures

Based on the ARMIS data, the Bells spent roughly $16 billion in capital expenditure in 2002, 35% below the 2001 level. The largest portion of the budget was spent on central office transmission, which includes radio systems and circuit equipment. This segment comprises 36% of the total capital spent, followed by cable and wire at 32%, central office switching and another at 15%, and land and support also at 15%. Capital spending equates to 18.0% of wireline sales versus 26.1% of sales in 2001, a peak level since 1990. Unfortunately, ARMIS does not provide data as to what portion of capex is related to labor. Note that the data do not include unregulated affiliates that would include spending on DSL infrastructure.

The Bells vary somewhat on where they spend their capex budgets, but the trends remain similar. Verizon spent 41% of its capex on central office transmission versus roughly 34% for SBC and BellSouth. Similarly, this category represented 7.3% of sales for Verizon versus 6.1% and 5.8% for SBC and BellSouth, respectively. Spending on this category had grown steadily throughout the 1990s until 2002 when it dropped by 43%. In contrast, the Bells have continued to reduce spending on central office analog and digital switching. This line now represents only 2% of sales versus 6% a couple of years ago.

In 2002, the Bells lined up in a tight range of capital expenditure to sales at 17.5% to 18.4% with Verizon at the higher end. Historically, BellSouth has outpaced the group in capex to sales, spending 23-27% of sales.

BellSouth generated the highest operating free cash flow margin in 2002 by far at 35.1% driven by both the highest EBITDA margins in the group at 52.7% and the lowest capex to sales ratio of 17.5%. While SBC's capex to sales ratio was lower than Verizon's, the company generated lower operating free cash flow margins because of significantly lower margins in its base. In 2002, the reduction in capital expenditure was the driver of operating free cash flow as EBITDA margins contracted for all of the Bells.

For 2003, Verizon's guidance implies a capex to sales ratio of 16.1% and an improvement in margins (excluding pension expense). This suggests that free cash flow margins will continue to improve in 2003. SBC and BellSouth's guidance implies capex to sales ratios of 15.1% and 18.4%, respectively, in 2003. We believe margins, stripping out the pension impact, will deteriorate for SBC and BellSouth, implying that free cash flow margins will also fall.

Risk Statement

- **SBC:** Risks include increased competition in the core wireline business that could deteriorate free cash flow, adverse regulatory rulings, exposure to economic cycles, and impact of potential wireless consolidation.

- **BellSouth:** Risks include increased competition in the core wireline business, adverse regulatory rulings, exposure to economic cycles, impact of potential wireless consolidation, and further deterioration in Latin American economy.

- **Verizon:** Risks include increased competition in the core wireline business, adverse regulatory rulings, exposure to economic cycles, and possible liability to buy in remaining Verizon Wireless stake in Vodafone.

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Spotlight On. . .

Brokerage Industry: Battling Cyclical and Structural Issues

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Assumed Coverage of the Brokerage Industry

- A combination of structural and cyclical pressures makes us cautious in the near term, but we believe valuations are reasonable and business models have been battle-tested and have improved significantly.

- **Structural and cyclical issues weigh in on the group.** Structurally, excess capital, limited barriers, and disintermediation of the cash equities business continue to point toward lower ROEs over the cycle. Cyclically, the tale of two markets may continue with fixed income, currencies, and commodities (FICC) offsetting anemic equity and M&A volumes, just not at the pace of the first quarter. We would rather not chase Bear Stearns and Lehman at these valuations.

- **However, profitability has been resilient.** During the downturn, profitability has been maintained because of more diverse revenue streams, extremely variable cost structures, and better risk management.

- **Long-term trends remain favorable.** We believe in the secular growth story, the long-term prospects for M&A, the breadth and diversity of the FICC business, and the industry's ability to innovate and capture new growth opportunities. The normalized revenue run rate should be better than today.

We Recommend a Neutral Stance on the Group

We recommend a neutral stance on the group, with Merrill Lynch and Morgan Stanley at Buy 2 ratings and Bear Stearns, Lehman Brothers, and Goldman Sachs at Neutral 2.

Battling Cyclical and Structural Issues

Like all dynamic industries, the brokerage business has a number of compelling investment rationales, as well as more than its fair share of counterbalancing issues. While many of the drivers and challenges of the business are fairly well understood, in this article, we attempt to provide some color on the issues that we view as structural (i.e., fundamental changes in the business that companies must adapt to), as well as a review of the cyclical challenges, which are more related to gyrations in the economy and geopolitical events. We think that viewing the brokerage industry in this context is important, since a rebound in the economy or alleviation of war apprehension might cure some of the cyclical pressures; however, the structural problems are not likely to go away anytime soon, which we believe should impact how investors think about reasonable trading ranges and valuations going forward.

Cyclical and Structural Issues Are Plentiful

Unfortunately, there are plenty of structural and cyclical issues. Most importantly, too much capital and competition is chasing too little business, prompting some players to use capital as a competitive weapon. This has resulted in significant price compression in many products that is driving down margins and ROEs. Corporate and institutional clients are flexing their pricing power, the buy side continues to find ways to get around the Street, or at least pay it less, and regulatory/litigation issues continue to unravel. On the cyclical front, it continues to be a tale of two markets as record FICC earnings, while seemingly unsustainable, continue to offset anemic equity underwriting and M&A volumes.

But the Business Models Have Been Incredibly Resilient

On a more positive note, respectable profitability during a downturn reflects better business models, highlighted by more diversified revenue streams, serious expense flexibility, and enhanced risk-management teams, systems, and vehicles. Additionally, we continue to believe in both the secular growth story and the long-term prospects for M&A activity. Also, FICC is more well-rounded than currently perceived, and innovative businesses/products continue to provide growth opportunities (credit derivatives, prime brokerage, and program trading are a few recent examples). Finally, we think that some pent-up demand in the equity market suggests the normalized revenue run rate is above current levels, the private client business has become underappreciated, and recent expense initiatives create potential positive operating leverage.

Investment Issues and Rationale Overview

Excess Capital/Competition Chasing Too Little Business

Probably the most significant issue in the brokerage business, in our view, is the fact that there are too many companies with too much capital chasing too little business. As a point of reference, total equity for the big five independent brokers has risen by 120% since the end of 1997. The problem is exacerbated by the fact that competitive barriers in the industry aren't that high and not all the participants are completely rational. The end result is (inevitably) limited differentiation and lower margins as new products and geographies are pursued and pricing is ultimately used as a competitive weapon in the quest to build market share.

So what happens from here? Clearly the blind pursuit of business, without near-term regard for returns, cannot continue in perpetuity. Absent a significant rebound in market activity, a sharpened focus on ROEs will need to dominate strategies and companies will need to make tough but necessary decisions on cost structures, business lines, and geographies. The good news is that the excess capacity can be evaluated one business at a time and resources and capital in this industry can be reallocated relatively quickly and is something the group has excelled at as of late. Unfortunately, the recent round of layoffs has not really solved any of these structural issues, but just bides time in hope that a recovery is not far off. At the end of the day, we think that a combination of consolidation, business rationalization, and even some more companies closing shop will be necessary to bring the business back in balance.

The Business Is Becoming More Capital Intensive

The mounting capital intensity of the brokerage business is increasing risk and reducing returns. While there has been much criticism about the increased use of credit in an attempt to win business, capital commitments are also rising on trading desks in order to provide liquidity, in underwriting to win spot secondary transactions, and even in prime brokerage to provide aggressively priced funding for hedge fund clients. Unfortunately, we believe the increased capital intensity is more a function of pull (from clients) than it is push (from the banks). Despite some recent high-profile, lending-related disasters for a few of the more aggressive offenders, a higher level of capital commitment is likely here to stay for all participants, which tends to increase risk and reduce future ROEs at the average broker dealer (not a good thing for valuations).

Ongoing Price Compression Across Too Many Businesses

All of this increased competition, coupled with enhanced technology, is marginalizing the intermediary and putting pressure on margins for most brokerage products. Until recently, for 25 years, the industry has been able to make up for this price compression with higher volumes, however, with volumes no longer on the rise, this is becoming increasingly difficult. Interestingly, not all the pressure is coming from heightened competition. Pricing power resides with the corporate and institutional clients and many are taking full advantage of their importance by both shopping around and negotiating diligently. While the M&A and IPO businesses have been fairly insulated from price compression, most debt underwriting products, many of the trading businesses (cash and derivatives), and even a portion of equity underwriting have been hit fairly hard. Though the pace of the pricing declines has eased, we are not expecting a reversal, of course. The challenge at this point is not only evaluating client profitability, but actually doing something about it (either sell them more services or reduce allocated resources).

The Cash Equities Business Is Being Disintermediated

Meanwhile, the commission pool of the buy side has been shrinking (in line with the bear market) and the buy side has increasingly been finding ways to bypass the sell side or, at a minimum, pay it less. While part of the objective is certainly about cost cutting, execution quality (speed, price, and market impact) and anonymity are among the most significant drivers of where order flow is directed, and alternatives for these drivers are increasing at a time when managers are paying more attention to their fiduciary responsibility. Unfortunately for the sell side, deal flow has, for the most part, evaporated, research quality is under the microscope (and shrinking), and capital is being used more sparingly, which gives the buy side even less incentive to trade with the Street. Furthermore, ECNs and alternative trading systems (ATSs) continue to take share, program trading volumes are on the rise (and seeing price compression), money managers are beginning to execute repurchases and secondaries directly from corporations, and the ability to access the exchanges directly is inevitable, in our view. Additionally, given the severe move down in share prices, tiered pricing is all too common and there has been talk of moving to basis-point-structured trading commissions from the current per share

charges. Each of these items is challenging both liquidity and profitability on the Street. In our view, if current conditions were to persist, significant structural changes to the business would be required.

Regulatory and Litigation Issues Continue to Linger

It's no secret that questionable off-balance-sheet transactions, accounting lapses, aggressive revenue recognition, and conflicted Wall Street research have contributed to a loss of confidence for institutional and retail investors. These items have also impacted near-term activity levels of corporate customers in the form of reduced M&A and structured finance transactions. Altogether, this crisis has contributed to lower valuations, increased litigation risk, and reduced activity levels on the part of investors. Of course, we would be remiss not to mention the near-impossible task of trying to predict the eventual civil liabilities these situations have created as research and IPO-related class actions continue to build. We think this overhang will persist for a while, and better clarity is essential before the stocks can see a material recovery. While we believe that these issues are ultimately surmountable, resolution will take time.

Business Activity Levels Remain Weak

While we have tried to focus our discussion on the structural issues facing the brokerage industry, we believe it is hard to ignore the fact that cyclical weakness continues to weigh heavily on activity levels and, therefore, on the stocks. It's no secret that broker land has been a tale of two markets with record FICC earnings offsetting anemic activity in equity and M&A. While many thought that 2001 was as bad as it could get, 2002 took the "trough" to new levels and the first quarter of 2003 was no better. M&A activity is at 1996 levels and fading, the equity underwriting calendar continues to shrink, and investors' litmus test for new deals has increased, which exacerbates the problem. While overall equity trading volumes actually picked up recently, the first quarter was off 20% from 2002 and dollar volumes have suffered because of the falloff in share prices. We believe this is a relevant data point as investors are more likely to trade lower-priced stocks on either an ECN or ATS or simply negotiate a lower fee. One of the greatest challenges managements and investors are facing is determining what the true normalized revenue and activity run rate will be going forward.

Sustainability of Fixed Income Boom Is in Question

While the equity and M&A markets have been decaying, the FICC businesses have been keeping the brokers afloat over the past two years hitting record levels in the first quarter of 2003. While low absolute rates, a steep yield curve, and volatile currency and commodity markets support the case for a strong FICC contribution, sustaining current production levels may prove near impossible. While March remained strong, any fallout in the FICC that is not accompanied with a pickup in equities could be rough on profitability, in our view.

Largest Cost Saves Have Been Harvested, Expensing Options Won't Help

In the recent past, we believe the brokers have done a great job at maintaining or improving their cost/income ratios to manage profitability by keeping compensation costs extremely variable and noncomp expense growth under

control. That said, while they seem to find a way every quarter, we think that managing expense flexibility in today's weak revenue environment has become a lot more difficult. More specifically, with noncomp expenses nearing a bottom and the comp ratio holding constant for the past 20 years at around 50%, weaker revenues have recently only been able to be offset by headcount reductions. In fact, we think that only the recent surge in fixed income has allowed the brokers to sidestep (for now) the unthinkable of taking the comp ratio below 50%. Additionally, with the increased usage of options and deferred comp such as restricted stock units (RSUs), likely changes to accounting rules (expensing) could pressure the comp line and overall profitability.

While the list of issues or challenges that must be surmounted to win in the brokerage business is long, we believe that there are certain fundamental positives that, in better economic times, should drive valuations higher, although nowhere near previous peaks.

Respectable Profitability During a Downturn Reflects Better Business Models

In general, we believe that the respectable profitability shown throughout the current downturn underscores how the risk profiles have improved at the average broker dealer. This improvement has been driven by more effective risk-management systems (e.g., technology and people), more diversified earnings streams (e.g., asset management and prime brokerage), improved risk-disbursement products (e.g., credit derivatives), and an overall more variable cost structure. Additionally, the brokers have more solid capital positions, reduced their leverage and VaRs, and laddered maturity schedules in order to reduce reliance on short-term funding, which has helped their ability to absorb exogenous shocks and to better cushion "trough earnings and ROEs." Altogether, while the securities industry posted negative 0.7% and positive 3.3% ROEs in past tough markets such as 1990 and 1994, respectively, the double-digit ROEs earned recently by the brokers have helped support overall valuations.

The Global Secular Trends Remain Intact

Despite the current bear market and crisis of confidence surrounding Wall Street, we believe that the main secular themes that helped drive demand for investment products during the 1990s remain intact. Specifically, the powerful demographic story around the world, which includes the rapidly growing pre-retiree population, is not only fueling demand for investment products, but is also driving new tax and pension legislation that should help encourage personal savings. In conjunction with this, low inflation, a rising interest in personal finances, greater access to information, and lower transaction costs should continue to drive increased ownership of equities and managed products both directly and indirectly over the next 10 years. Outside the United States, we believe equification, privatization, and debtification will continue to drive capital markets activity over the next decade. Despite similar GDP, the U.S. public market cap dwarfs that of Europe, which implies lots of fodder for the IPO market in the coming years (just probably not in 2003).

We Believe in the Longer-Term Prospects for M&A

While there are legitimate arguments for the stagnant M&A environment to last, we believe that the macro trends supporting global M&A activity across many industries and geographies remain solid and will eventually prevail. Even though corporate activity is fairly dormant right now and numerous recent mega-mergers have been disappointments, we believe a pickup from current levels is inevitable and needed. We expect the drive for scale to continue, fueled by very limited pricing power across most industries and an interest in reducing excess capacity, which tends to drive balance sheet restructurings, divestitures, and acquisitions. Interestingly, M&A as a percentage of equity market cap and GDP is currently at the low end of the historical ranges. Nonetheless, we temper our expectations and do not anticipate a recovery of M&A activity until 2004.

FICC Is More Well-Rounded Than Perceived

As the stars have seemed to align for the FICC businesses over the past two years hitting record revenues in the most recent quarter, many (including us) have begun to question the sustainability of the FICC performance. With that said, while its doubtful we will match first quarter 2003 results anytime soon, we believe that the FICC is a far more dynamic mix of businesses than investors are currently giving credit, which can produce solid results over the course of the cycle. In our view, the only environment that would wreak havoc on FICC results would be rapidly rising interest rates and a flattening yield curve. Given the softness in the economy, this is a scenario we are not assigning a very high probability to. In fact, conditions remain ideal with low interest rates, a steep yield curve, tightening credit spreads, and volatility in the currency and commodity businesses continuing to drive strong volumes. An important takeaway here is that fixed income does not typically have an on/off switch, is mostly actively managed (about 93% of assets), and is a self-generating business given the periodic cash flows.

Innovative Businesses/Products Provide Growth Opportunities

While the brokerage industry seems like the poster child for excess competition and margin compression, it never ceases to amaze us as this industry consistently finds a way to evolve its product and services set and invent or migrate toward higher-margin and stronger-growth businesses. Though the capacity and low-barrier issues tend to make periods of excess profits more short-lived than in the past, today's companies are better managed and produce more consistent and attractive returns (relative to a decade ago). In our view, credit derivatives, prime brokerage, and program trading represent three of the more recent examples of how the industry has adapted to changing market conditions and has produced very profitable and growing revenue streams in response to certain challenges.

Retail/HNW Has Become an Underappreciated Business

Retail may be down, but it's not going to be dormant forever. Sizeable market losses have brought the activity level of the average individual investor to a crawl and issues related to weak corporate governance and conflicts of interest on Wall Street continue to push investor confidence lower. As such, many in the industry have looked to the long lag of retail activity following the crash of 1987 as a sign to avoid the retail-oriented broker dealers and focus on the more

institutional franchises as the economy begins to recover. In our view, while academically accurate, we believe that there are a number of factors that make comparisons to the 1987 period not overly applicable.

Private Client Business Has Been Taking Share From Other Financial Services Companies

Moreover, we believe the private client advisory relationship is unique in the brokerage business as it represents a differentiated service that has not been commoditized because of excess competition. Additional attractive attributes that we find compelling about the private client business include: demographics will continue to drive investment demand globally; third-party fund distribution continues to grow in importance; retail revenue streams continue to be annuitized; customer segmentation strategies and cost rationalization are improving profitability; and new financial products, such as mortgages, are being introduced and accepted. Given these expanded, noncommoditized relationships, retail trading volumes do not need to materially rebound for private client businesses to flourish (though it would certainly help).

The Big Will Continue to Get Bigger

The cross-subsidization of clients, products, and business lines across geographies is increasing the need for scale, raising the bar for competition, and consolidating market share. As margins in many businesses continue to trend lower while demands from corporate and institutional clients continue to rise, the brokerage industry must find ways to leverage its existing client base by integrating product capabilities in a cost-effective manner and delivering them in an integrated and seamless fashion. While certain investment banking services have been unbundled, we think the trend is clearly toward larger, more bundled relationships with both corporate and institutional clients. Underscoring this trend, between 1997 and 2002, market share captured by top-10 brokers has risen across the board.

Broad Global Franchises That Are Low-Cost Providers Should Retain Market Share

On the corporate side, companies are clearly interested in a more bundled approach, as evidenced by their allocation of business, such as debt underwriting, to their primary creditors. At the same time, buy-side clients continue to consolidate and gather assets and are increasingly demanding global products and services. As discussed earlier, most buy-side shops are paring down the number of companies with which they do business in an effort to focus dwindling commission pools on those counterparties that truly add value. In this environment, we think that the broad global franchises that are the low-cost providers with breadth of product and superior technology will better win and defend market share.

What Does All This Mean for Stock Selection?

So, all in all, while the sector has been battered by a confluence of issues, it is far from beaten. Our conclusion on the stocks considers the fact that we expect a very gradual recovery in M&A, equity trading, and underwriting, as well as an extension of the fixed income cycle (though not at the first quarter's record pace). As rates remain low, the yield curve remains fairly steep and the potential

for further rate cuts is there. As such, we think a neutral stance on the group is appropriate at this time as the group has sustained reasonable profitability throughout the downturn, while simultaneously creating the potential for positive operating leverage. Though fundamentals aren't great, we think that the brokers' models have proven incredibly resilient and command higher valuations than past tough markets. At this point, our bias is to recommend exposure to companies with more balanced business mixes than can be defensive should the fixed income cycle extend, yet still fully participate in an equity recovery.

We Have a Neutral Stance on the Group and Recommend Citigroup, Merrill Lynch, and Morgan Stanley

Despite their excellent performance and expense and risk management, we do not recommend chasing Lehman or Bear Stearns considering the strong outperformance of the stocks and closing of the relative valuation gap. Lehman's very high-equity compensation package also causes us some pause. Goldman Sachs has also done a great job of managing through the environment, but is also a bit pricey, appears to have taken on a little more risk than its competitors, and is most levered to a stronger equity environment that might take a while to recover. In terms of the Buys, Citigroup is our favorite as we do not think its valuation fully reflects the company's unparalleled diversification, management discipline, and proprietary distribution that have been supporting its superior profitability. We also do not think that the consumer is going to fold. For Morgan Stanley, we think the company could put up the best ROE in the group and relatively stable earnings thanks to its business diversification, as cards and asset management accounted for 43% of earnings last year and the company appears to have more expense leverage than its peers. Also, its two main issues, aircraft and retail, while not good, are well-known and appear to be contained. Finally, we believe Merrill Lynch is the value play in the group. Despite not having the most favorable business mix for current conditions, the cost takeout has been large and has more room, the company's customer and asset bases in private client have become underappreciated, and the valuation already discounts further legal liabilities.

Stock Picking Counts

The past two and a quarter years have been tough for the brokerage and universal bank stocks, as both cyclical and structural issues have weighed on the valuations and stock prices. For the period 2001 to date, the brokerage group slid 19% on average, the universal bank group fell 37% on average, and the S&P 500 was down 33%. The underperformance of the universal banks was mostly a function of deteriorating credit and related issues. However, its amazing to see that despite the brokers' and universal banks' market sensitivity, stock picking counts in this universe as the spreads between the best and worst performers in 2001, 2002, and 2003 year to date were 45%, 51%, and 27%, respectively.

A Look At Valuation

Valuation for the brokerage group can be a difficult task considering the large number of variables that significantly impact traditional metrics, such as earnings and cash flow for the average broker dealer. Given that volatility and

uncertainty, combined with the assurance of mark-to-market accounting, investors have grown relatively comfortable with relying on a company's price to book (P/B) ratio on an absolute basis, relative to the S&P and relative to its peers (especially at times of uncertainty such as today). Not too surprisingly, there is a fairly strong correlation between the industry's ROE and the trading level of its P/B. Additionally, while many have made the argument that the brokers are producing respectable double-digit ROEs during this weak market (an argument that we would agree with), we would also advise a second look at "real" ROEs net of the effects of expensing options and making sure goodwill is included in the denominator.

Factors to Consider When Looking at History

As one might expect, absolute and relative P/B ratios have come down with the overall markets and the returns of the brokerage industry. When looking at valuation for the group today, a relative valuation call on the group is significantly impacted by the macroeconomic call, but also depends on what time period is defined as history. For example, looking at today's valuation relative to the past five years, the stocks would look relatively cheap; however, when considering a longer history, the group is trading below its 10-year historical average but in line with its 15-year mean. Additionally, for a company such as Lehman, we believe you must consider the incredible transformation the company has undergone over the past five years into a significantly broader and more diversified franchise.

We Expect a P/B Trading Range of 1.4-2.4 Times

In our view, there are several factors that suggest that, over time, industry multiples should expand from current levels, while at the same time, there are other factors that indicate multiple expansion may be difficult to achieve. Importantly, despite the meaningful challenges the industry faces, more diversified revenue streams, expense flexibility, and risk-management tools should result in better trough profitability and keep us well above the historical "buy trigger" of 1.0 times book. On the other end of the spectrum, given today's competitive environment and reduced activity levels, multiples are not likely to reach highs seen in the past. In other words, we doubt we will return to the lofty greater then 3.0 times book either. In fact, with expectations for lower peaks and higher troughs in ROE, we think P/Bs will follow suit and would expect the majority of observations to take place in a trading range in the neighborhood of 1.4-2.4 times over time. As such, given the current fundamentals, today's 1.73 times is reasonable, in our view.

Statement of Risk

Economic and geopolitical factors, regulatory and litigation issues, as well as market fluctuations and activity levels in the capital markets may materially effect operating results

Rating Change Review

Friday, April 11, 2003 – Wednesday, April 16, 2003

NOTE: All pricing information is taken from the original research note.

Accenture Ltd. (ACN-$14.90)

Change in Rating *Buy 2*

Though key financial metrics (including bookings and revenues) have trended well so far in the May quarter, we think macro uncertainties (e.g., economic growth, corporate profits, war, and SARS) bring incremental volatility to near-term estimates. We lowered our F2003 revenue and EPS estimates to $11.5 billion and $1.02 from $11.6 billion and $1.06, respectively. We are still bullish on shares and maintain our Buy recommendation, but we lowered our predictability rating to 2 from 1 and our 12-month price target to $20 from $25 to account for increased uncertainty regarding near-term and long-term margins because of outsourcing project ramps and mix shifts. *(April 15, 2003)*

Adam Frisch (+1-212-713 3788)

CompuCredit Corp. (CCRT-$7.60)

Downgraded From Neutral 2 *Reduce 2*

We downgraded our rating on CCRT shares to Reduce 2 from Neutral 2 on a combination of fundamental concerns and recent price appreciation. We also trimmed our 12-month price target to $5.00 from $6.50, as we believe the additional liquidity risk and potentially higher funding costs negatively impact the valuation. From a fundamental standpoint, we have become increasingly concerned about the company's liquidity situation after it revealed in its 10-K that the company does not expect to be cash flow positive in 2003 because of early amortization events in its recently acquired Providian and FingerHut portfolios, as well as the possibility of early amortization in the Master Trust that holds the assets of its originated portfolio. In our view, these early amortization events, along with additional credit enhancements being required on existing securitizations, will put a strain on cash flow and liquidity and may require the company to refinance these assets at less favorable terms. Further, the shares have appreciated roughly 20% over the past few weeks. We believe the current valuation is unsustainable given our fundamental outlook for the company, and based on our concerns, would encourage investors to exit the shares at these levels. *(April 16, 2003)*

Eric Wasserstrom (+1-212-713 9435)

Hilton Hotels Corp (HLT-$12.83)

Downgraded From Buy 2 *Neutral 2*

We downgraded Hilton to Neutral 2 from Buy 2 based on the company's valuation. Hilton is up 17% since the end of February compared with just 5% for the S&P 500. Our 2003 and 2004 estimates are unchanged and our 12-month price target remains $14. We recommend that investors hold HLT at its current price. HLT currently trades at 9.6 times our forward four-quarter (1Q-4Q03) EBITDA estimate of $919 million. Assuming that HLT trades at 9.0 times our 2004 EBITDA forecast in one year, our price target remains $14. We believe that Hilton is gaining market share with its brands and that it owns hotels in markets with high barriers to entry. We also believe that Hilton will be one of the main beneficiaries of a rebound in corporate travel when it occurs. We believe there is downside risk to near-term earning estimates. *(April 15, 2003)*

Keith Mills (+1-212-713 3098)

Marriott International (MAR-$34.29)

Downgraded From Buy 1 *Neutral 1*

We downgraded Marriott to Neutral 1 from Buy 1 based on the company's valuation. Marriott is up 13% since the end of February compared with just 5% for the S&P 500. Our 2003 and 2004 estimates are unchanged and our 12-month price target remains $37.50. We recommend that investors hold MAR at its current price. MAR is currently trading at 18.0 times our forward four-quarter (2003) EPS estimate of $1.84. Assuming that MAR trades at 17.6 times in one year (19 times excluding its synthetic fuel business), our price target is $37.50. Marriott receives about 2-3% of its lodging operating profits from the Asia/Pacific region, so we do not believe the outbreak of SARS in that region will have a material impact on Marriott's financial results. We believe there is downside risk to near-term earning estimates. We believe the risks to an investment in MAR are that the company does not meet our new property addition and RevPAR and incentive fee forecasts. *(April 15, 2003)*

Keith Mills (+1-212-713 3098

MBNA Corp (KRB-$16.02)

Downgraded From Neutral 2 *Reduce 2*

We downgraded our rating on KRB shares to Reduce 2 from Neutral 2 based on price, as the shares are now trading roughly 35% above our 12-month price target of $13. The shares have appreciated over 45% in the past month, driven in large part by improving credit performance in February and March. We remain bearish on MBNA—and the credit card industry more broadly—for two reasons: 1) although investors may have concluded that the consumer credit cycle has turned, we are less optimistic, as recent data on unemployment, personal bankruptcy filings, and mail volumes suggest that credit performance in the industry should continue to weaken, albeit at a slower rate, over the next several months; and 2) we maintain our view that the chief challenge facing MBNA (and the industry) are not cyclical credit issues, but rather secular factors including portfolio growth in a slowing growth industry and margin compression driven by excessive capacity. Given these secular concerns, we believe current consensus EPS estimates overstate the growth and profitability prospects for the company, and therefore view the current valuation as unsustainable. *(April 16, 2003)*

Eric Wasserstrom (+1-212-713 9435)

Millennium Pharma. (MLNM-$8.99)

Downgraded From Buy 2 *Neutral 2*

MLNM reported a first quarter 2003 pro forma loss, excluding amortization and restructuring charges, of negative $0.34 per share, versus our estimate of negative $0.28 and consensus of negative $0.30. We downgraded MLNM to Neutral 2 from Buy 2 and lowered our one-year price target to $10 from $18 based on downside risk from Integrilin inventory stocking, short-term financial risk from the $600 million in puttable convertible debt, and the company's 2003 revenue goals, which we believe will be challenging to accomplish. Furthermore, we are concerned about the company's long-term financial risk, as the company is at risk of burning through its cash before it achieves profitability (assuming no additional financing). Although we remain positive on the prospects of Velcade, we are concerned that the puttable debt and Integrilin inventory issues pose downside risk to the stock ahead of potentially positive FDA Velcade events. *(April 16, 2003)*

Meirav Chovav (+1-212-713 3233)

Salix Pharmaceuticals (SLXP-$10.22)

Downgraded From Buy 2 *Neutral 2*

We downgraded SLXP to Neutral 2 from Buy 2, as we believe the stock is fully valued given its recent run up and the limited potential for significant additional near-term price appreciation. Since Axcan commenced its unsolicited bid for Salix's outstanding shares last Thursday, SLXP's stock price has jumped 40%. SLXP is now trading at 4 times sales, or near our new price target of $11 per share, which we believe is a fair value. While there is a possibility that SLXP may get taken out for more than $11 per share, in our view, there is a greater downside risk that the deal does not get done at all. We believe that this deal clearly validates Salix's model and valuation, putting its support level toward $9.00. We have raised our 12-month price target to $11 from $10, which reflects the result of a DCF using a 12% discount rate, and is in line with an EV/revenue multiple of 4 times, which is where similar names are currently trading. *(April 14, 2003)*

C.J. Sylvester (+1-212-713 1419)

US Bancorp (USB-$20.46)

Upgraded From Neutral 2 *Buy 2*

We upgraded shares of US Bancorp to Buy 2 from Neutral 2 based on valuation. At current levels, we believe the risk/reward looks attractive and the stock offers 15% upside to our 12-month price target of $23. Coupled with a projected dividend yield of 4%, this implies 19% total return over the next 12 months. While we remain concerned about revenue and credit quality challenges for USB and the industry in general amid continued weakness in the economy, we believe the company has some expense levers to pull in a weak environment and positive earnings leverage to a stronger economy in the form of lower commercial credit losses and stronger loan growth. *(April 14, 2003)*

John McDonald, CFA (+1-212-713 2354)

Starwood Hotels & Resorts (HOT-$25.33)

Downgraded From Buy 2 *Neutral 2*

We downgraded Starwood to Neutral 2 from Buy 2 based on the company's valuation. Starwood is up 12% since the end of February compared with just 5% for the S&P 500. Our 2003 and 2004 estimates are unchanged and our 12-month price target remains $27.50. We recommend that investors hold HOT at its current price. HOT currently trades at 9.3 times our forward four-quarter (2003)

EBITDA estimate of $1.086 billion. Assuming that HOT trades at 9.0 times our forward-looking EBITDA forecast one year from now, our price target is $27.50. Starwood derives about 1-2% of its EBITDA from Asia. Therefore, we do not believe the company will be materially affected from the outbreak of SARS in the Asia/Pacific region. We believe there is downside risk to near-term earning estimates. We believe the primary risk to a HOT investment is lower-than-expected RevPAR growth and owned/leased margins. *(April 15, 2003)*

Keith Mills (+1-212-713 3098)

We initiated coverage on Bear Stearns, and assumed coverage of Citigroup, Merrill Lynch, Morgan Stanley, Lehman Brothers, and Goldman Sachs. For details, please see the feature article in this issue.

Research Review

Friday, April 11, 2003 – Wednesday, April 16, 2003

NOTE: All pricing information is taken from the original research note.

Andrx Group (ADRX-$12.80)

Generic Tiazac; EPS Visibility Much Higher *Buy 2*

When we upgraded Andrx on March 26 to Buy 2 from Neutral 2, part of our thesis was that generic Tiazac (Biovail and Forest's $270 million hypertension drug) would likely be approved this quarter. Sure enough, Andrx received FDA approval for its generic on April 10. Andrx no longer has an official 180-day exclusivity on this product, but this is immaterial since the earliest that we could see another potential generic (Apotex, private company) is 2005. Thus, Andrx should indirectly have exclusivity on Tiazac for at least two years. Our generic Tiazac projections of $70 million in 2003 and $70 million in 2004 remain unchanged. Forest will launch its own generic, but we expect Andrx to take the majority of prescription share in the overall Tiazac market. *(April 11, 2003)*

Steven Valiquette (+1 203 719 6040)

General Motors (GM-$35.17)

Lowered Estimates *Buy 2*

GM earned a strong $1.81 per share in the first quarter including Hughes. But GM teased the market. While a very strong quarter for GMAC propelled first quarter earnings ahead of forecasts, GM promptly recoiled by indicating its full year EPS target of $5.00 ex-Hughes may be a challenge to meet. GM unnerved the markets with its vague assessment for annual targets and the commentary pretty much amounted to a veiled profit warning for the full year, in our opinion. Despite strong results, slowing demand, deteriorating pricing, and management's lack of confidence in its EPS target left us little choice but to lower expectations for both this year and next. Including Hughes, our 2003 EPS estimate fell to $4.40 from $4.75 and next year's forecast fell to $5.00 from $5.30. *(April 16, 2003)*

Saul Rubin (+1-212-713 1076)

Intel Corp (INTC-$17.13)

Raised Estimates *Buy 2*

Intel reported March quarter EPS of $0.14 on revenues of $6.751 billion. While revenues were only slightly above our expectations, gross margin at 52% was boosted by two unanticipated events that enabled EPS to be well above our $0.11-0.12 estimate. Gross margin was helped by roughly 200 bp by the sale of previously written-off inventory (which will not be repeated) and by a lower-than-expected startup cost on new 300-mm facilities. The June quarter outlook is better than we had expected at roughly $6.70 billion, which resulted in us raising our EPS estimate to $0.13 from $0.12 on $6.54 billion. Gross margin, with out the one-time events that boosted the March quarter, should return to roughly 50%. While the June quarter outlook is improved, visibility remains very limited and orders remain short term. We reiterate our Buy 2 rating and $22 target price. Based on the better-than-expected March quarter results and the slight improvement in the June quarter expectations we increased our 2003 EPS estimate to $0.63 on $28.4 billion in revenue from $0.58 on $27.9 billion. Our 2004 estimate increases slightly to $0.91 on $31.8 billion from $0.90 on $31.4 billion. *(April 16, 2003)*

Thomas Thornhill, III (+1-415-352 5667)

Juniper Networks (JNPR-$8.41)

Reported Solid First Quarter 2003 *Buy 2*

Juniper reported revenues and pro forma EPS of $157.2 million and $0.02 compared with our estimates of $155 million and $0.01, respectively. As we previewed, Juniper had strong sequential sales overseas of 8% while the United States continues to be weak, down 5% sequential. Book to bill was above one and visibility remains as good as last quarter heading into second quarter 2003. Gross and operating margins improved to 61.0% and 7.6% from 59.4% and 3.7% last quarter compared with our estimates of 60.0% and 4.7%, respectively. We slightly reduced our revenue estimates to $656 million and $790 million for 2003 and 2004 from $672 million and $798 million, respectively. Our new EPS estimates are $0.10 for 2003, up from $0.09; our 2004 estimate of $0.20 is unchanged. We also slightly reduced our price target to $10.20 from $10.50 to reflect a slightly lower revenue outlook for 2004. *(April 11, 2003)*

Nikos Theodosopoulos (+1 212 713 3286)

Millipore Corp. (MIL-$30.25)

Beat Estimates, But Biotechnology Weak *Buy 1*

Millipore reported first quarter 2003 EPS of $0.44, $0.04 above UBS Warburg estimates and $0.03 above Street consensus. The upside was because favorable foreign currencies, which added 9% to the top line. We maintain our Buy 1 rating and our $39 price target, 20 times our 2003 EPS estimate of $1.91. Because of the continued difficult environment and lowered growth expectations in 2003, we expect MIL shares to be lackluster in the near term. However, given the large number of drugs in the pipeline and MIL's significant presence in the biomanufacturing market, we continue to believe that the company's long-term prospects are solid. We raised our 2003 EPS estimate to $1.91 from $1.90 and increased our 2003 revenue projection by $6 million to $766M reflecting better growth in the life sciences and legacy segments than originally anticipated. *(April 16, 2003)*

Meirav Chovav (+1-212-713 3233)

Timberland Co. (TBL-$43.29)

Raised EPS Estimates *Buy 2*

Timberland had a great performance in the first quarter. Results were much better than expected, driven by strong sales, gross margin expansion, and expense leverage. Despite Timberland exceeding our first quarter earnings estimate, we are maintaining a conservative second half outlook for now. Accordingly, we increased our fiscal year 2003 EPS estimate of $2.90 by $0.20 to $3.10, using a 9% sales increase instead of our previous 8%. Additionally, we have raised our 2004 EPS estimate of $3.30 by $0.25 to $3.55, reflecting a 15% earnings increase. We remain of the opinion that the Timberland brand is one of the strongest within the apparel and footwear sector. Backed by increased advertising and marketing expenditures, the combination of new product introductions, and an increased global penetration, we believe management's sales objectives should be achieved, if not exceeded. *(April 15, 2003)*

Jeffrey Edelman (+1-212-713 2438)

WCI Communities (WCI-$10.88)

Valuation Appears Cheap, in Our Opinion *Buy 2*

WCI's total orders for first quarter 2003 were down 4% year over year to $240.3 million with 24% fewer contracts (450 units) signed at a 26% higher average price. The soft economy and stock market gyrations, coupled with recent war concerns, have curtailed potential buyers from purchasing. Given the greater-than-expected mix of higher-margin tower revenues, we raised our first quarter 2003 EPS to $0.26 from $0.25. We are forecasting $11.6 million net income. Management now expects net income at the lower half of its $10-15 million guidance. We no longer believe that WCI management is being penalized for the earnings miss, however we do believe that investors are concerned about the limited earnings visibility of its concentrated business model. That said, the risk/reward proposition appears extremely attractive in our opinion. Management estimates that book value could rise by $200-250 million ($5.00-6.00 per share) if land is marked to market. On a final note, WCI could be an interesting takeover candidate, in our view. *(April 11, 2003)*

Margaret Whelan (+1 212 713 7969)

EPS Estimate Revisions

Upward Revisions (4/11/03-4/17/03)

Company	FY	New	Old	% Ch	Chg. Date
Alaska Air Group	12/03	-3.20	-3.45	+7.2	4/13
Allstate Corp	12/03	3.60	3.40	+5.9	4/16
	12/04	3.85	3.70	+4.1	4/16
AT&T Wireless Group Inc.	12/03	0.13	0.12	+8.3	4/14
Bank of America Corp.	12/03	6.30	6.15	+2.4	4/14
Broadcom Corp	12/03	0.33	0.18	+83.3	4/16
	12/04	0.33	0.30	+10.0	4/16
Burlington North	12/03	2.10	2.08	+1.0	4/14
C.R. Bard	12/04	4.23	4.22	+0.2	4/15
Cadence Design System Inc.	12/03	0.50	0.45	+11.1	4/16
ChevronTexaco Corp	12/04	4.79	4.78	+0.2	4/15
Cree Inc.	12/03	0.47	0.44	+6.8	4/16
D.R. Horton Inc.	9/03	3.69	3.63	+1.7	4/16
Davita Inc.	12/03	1.99	1.93	+3.1	4/15
Electronics for Imaging Inc.	12/04	0.86	0.85	+1.2	4/16
ExxonMobil Corp	12/03	2.35	2.34	+0.4	4/15
	12/04	2.24	2.22	+0.9	4/15
	12/05	2.10	2.08	+1.0	4/15
Fannie Mae	12/03	7.45	7.10	+4.9	4/14
	12/04	8.10	7.80	+3.8	4/14
Ford Motor	12/03	0.55	0.35	+57.1	4/16
	12/04	0.65	0.40	+62.5	4/16
Forest Laboratories	3/03	1.69	1.66	+1.8	4/16
	3/04	2.10	2.04	+2.9	4/16
	3/05	2.30	2.13	+8.0	4/16
Gap Inc	1/04	0.67	0.65	+3.1	4/13
Guidant Corp	12/03	1.92	1.90	+1.1	4/16
Harley Davidson Inc.	12/03	2.37	2.30	+3.0	4/16
Intel Corp	12/03	0.63	0.58	+8.6	4/16
	12/04	0.91	0.90	+1.1	4/16
Johnson Controls Inc	9/03	6.95	6.90	+0.7	4/16
Kinder Morgan, Inc.	12/03	3.25	3.20	+1.6	4/15
Lam Research	6/03	0.10	0.04	+150.0	4/16
Merrill Lynch & Co.	12/03	2.77	2.68	+3.4	4/16
Microsoft Corp	6/03	1.04	1.01	+3.0	4/15
Millennium Pharmaceuticals	12/04	-0.73	-0.80	+8.8	4/16
Millipore Corp.	12/03	1.91	1.90	+0.5	4/15
Mohawk Industries, Inc.	12/03	4.55	4.30	+5.8	4/16
	12/04	5.00	4.94	+1.2	4/16
National City Corp	12/03	2.80	2.60	+7.7	4/16
	12/04	2.85	2.75	+3.6	4/16
Nextel Communications, Inc.	12/03	1.09	1.07	+1.9	4/14
	12/04	1.68	1.63	+3.1	4/14
	12/05	1.40	1.38	+1.4	4/14
Norfolk Southern	12/03	1.30	1.28	+1.6	4/14
NVR, Inc.	12/03	42.60	42.10	+1.2	4/16
	12/04	46.86	46.60	+0.6	4/16
Occidental Petroleum	12/03	3.69	3.65	+1.1	4/15
PacifiCare Health Systems	12/03	5.43	4.30	+26.3	4/16
	12/04	6.00	4.94	+21.5	4/16
Powerwave Technologies Inc.	12/03	-0.29	-0.34	+14.7	4/16
Providian Financial Corp.	12/03	0.82	0.80	+2.5	4/16
Public Service Enterprise	12/03	3.90	3.75	+4.0	4/16
	12/04	4.10	3.85	+6.5	4/16
RPM International, Inc.	5/03	1.03	1.02	+1.0	4/15
St. Jude Medical	12/03	1.80	1.75	+2.9	4/16
	12/04	2.20	2.02	+8.9	4/16
State Street	12/03	2.05	2.00	+2.5	4/16
	12/04	2.35	2.30	+2.2	4/16
Stryker Corp	12/03	2.18	2.10	+3.8	4/16
	12/04	2.64	2.52	+4.8	4/16
Texas Instruments	12/04	0.71	0.70	+1.4	4/16
Timberland Co.	12/03	3.10	2.90	+6.9	4/15
	12/04	3.55	3.30	+7.6	4/15
UAL Corp	12/03	-24.44	-25.95	+5.8	4/13
Union Pacific Corp.	12/04	5.00	4.90	+2.0	4/16
United States Cellular Corp.	12/04	2.39	2.19	+9.1	4/14
UnitedHealth Group	12/03	5.40	5.18	+4.2	4/16
	12/04	6.20	5.95	+4.2	4/16
US Bancorp	12/03	2.00	1.97	+1.5	4/15
W-H Energy Services Inc	12/03	1.10	0.85	+29.4	4/16
	12/04	1.50	1.36	+10.3	4/16
Wachovia Corp	12/03	3.07	3.04	+1.0	4/16
	12/04	3.35	3.30	+1.5	4/16
Wells Fargo & Co.	12/03	3.64	3.45	+5.5	4/15
	12/04	4.00	3.80	+5.3	4/15

Downward Revisions (4/10/03-4/17/03)

Company	FY	New	Old	% Ch	Chg. Date
Accenture Ltd.	8/03	1.02	1.06	-3.8	4/14
	8/04	1.13	1.17	-3.4	4/14
Alltel Corp.	12/03	3.07	3.10	-1.0	4/14
	12/04	3.37	3.38	-0.3	4/14
	12/05	3.62	3.63	-0.3	4/14
Amerada Hess	12/03	5.57	5.61	-0.7	4/15
	12/04	3.93	4.00	-1.7	4/15
	12/05	2.21	2.28	-3.1	4/15
America West Holdings	12/03	-6.10	-3.30	-84.8	4/13
AMR Corp	12/03	-15.00	-14.65	-2.4	4/15
Baker Hughes Inc	9/03	0.95	1.10	-13.6	4/15
Bank One Corp	12/03	2.94	3.03	-3.0	4/15
	12/04	3.25	3.35	-3.0	4/15
Baxter International	12/03	2.06	2.08	-1.0	4/16
BellSouth Corp	12/04	1.74	1.80	-3.3	4/15
	12/05	1.74	1.86	-6.5	4/15
Boeing Co	12/03	1.80	2.00	-10.0	4/11
Bristol-Myers Squibb	12/04	1.72	1.74	-1.1	4/16
	12/05	1.88	1.98	-5.1	4/16
ChevronTexaco Corp	12/03	6.16	6.25	-1.4	4/15
Comerica Inc	12/03	4.05	4.10	-1.2	4/16
	12/04	4.40	4.50	-2.2	4/16

Company	FY	New	Old	% Ch	Chg. Date
ConocoPhillips	12/03	5.76	6.20	-7.1	4/15
	12/04	5.11	5.30	-3.6	4/15
Continental Air	12/03	-6.40	-5.65	-13.3	4/13
Delta Air Lines	12/03	-8.75	-8.00	-9.4	4/13
FleetBoston Financial	12/03	2.35	2.40	-2.1	4/14
	12/04	2.65	2.70	-1.9	4/14
General Dynamics	12/04	5.15	5.40	-4.6	4/16
General Motors	12/03	4.40	4.75	-7.4	4/15
	12/04	5.00	5.30	-5.7	4/15
GlobalSantaFe Corp	12/04	1.34	1.35	-0.7	4/11
Goldman Sachs	11/03	4.60	4.72	-2.5	4/11
Grainger (WW) Inc.	12/03	2.65	2.76	-4.0	4/16
	12/04	3.00	3.18	-5.7	4/16
Guidant Corp	12/04	1.63	1.68	-3.0	4/16
	12/05	1.80	1.85	-2.7	4/16
HCA Inc	12/03	2.95	3.20	-7.8	4/15
	12/04	3.25	3.69	-11.9	4/15
JetBlue Airways Corp	12/03	1.00	1.07	-6.5	4/13
Kinder Morgan Energy Partners	12/04	2.15	2.20	-2.3	4/16
King Pharmaceuticals, Inc.	12/03	1.53	1.57	-2.5	4/16
	12/04	1.73	1.77	-2.3	4/16
Knight Ridder Inc.	12/03	3.75	3.80	-1.3	4/15
Lafarge North America	12/03	3.30	3.45	-4.3	4/16
	12/04	3.85	4.05	-4.9	4/16
Lear Corp	12/03	4.85	4.86	-0.2	4/16
Lyondell Petrochem	12/03	0.00	0.20	-100.0	4/16
	12/04	2.23	2.52	-11.5	4/16
Manpower Inc.	12/03	1.55	1.65	-6.1	4/15
	12/04	2.00	2.20	-9.1	4/15
Marathon Oil Corp	12/03	2.88	2.96	-2.7	4/15
	12/04	2.12	2.21	-4.1	4/15
	12/05	1.59	1.61	-1.2	4/15
Martin Marietta Materials Corp	12/03	1.76	2.05	-14.1	4/16
	12/04	2.24	2.50	-10.4	4/16
MGM Mirage	12/03	1.48	1.72	-14.0	4/16
	12/04	1.87	2.05	-8.8	4/16
Microsoft Corp	6/04	1.05	1.07	-1.9	4/15
Millennium Chemicals	12/03	0.35	0.75	-53.3	4/16
	12/04	2.04	2.37	-13.9	4/16
Millennium Pharmaceuticals	12/03	-1.05	-1.00	-5.0	4/16

Company	FY	New	Old	% Ch	Chg. Date
Molex Inc	6/03	0.57	0.60	-5.0	4/16
	6/04	0.75	0.80	-6.3	4/16
	6/05	0.95	0.98	-3.1	4/16
Molex Inc - A	6/03	0.57	0.60	-5.0	4/16
	6/04	0.75	0.80	-6.3	4/16
	6/05	0.95	0.98	-3.1	4/16
Murphy Oil Corp	12/04	2.98	2.99	-0.3	4/15
	12/05	2.45	2.46	-0.4	4/15
Nassda Corp.	9/03	0.12	0.16	-25.0	4/16
New York Times	12/03	2.20	2.25	-2.2	4/14
Nextel Partners, Inc.	12/03	-0.58	-0.53	-9.4	4/14
	12/04	-0.01	0.04	-125.0	4/14
	12/05	0.63	0.76	-17.1	4/14
Northwest Airlines	12/03	-11.50	-6.25	-84.0	4/13
Novellus Systems	12/03	0.26	0.40	-35.0	4/14
	12/04	0.75	1.00	-25.0	4/14
Parker Hannifin	6/04	2.25	2.35	-4.3	4/15
Polo Ralph Lauren Cp -Cl A	3/03	1.83	1.86	-1.6	4/16
	3/04	2.00	2.05	-2.4	4/16
Powerwave Technologies Inc.	12/03	-0.34	-0.11	-209.1	4/11
Qualcomm Inc.	9/03	1.19	1.37	-13.1	4/16
	9/04	1.21	1.39	-12.9	4/16
Rockwell Collins Inc	12/04	1.42	1.45	-2.1	4/16
Rowan Companies	12/03	0.20	0.37	-45.9	4/16
Safeway Inc	12/03	2.10	2.40	-12.5	4/16
	12/04	2.15	2.48	-13.3	4/16
SBC Communications, Inc.	12/04	1.32	1.37	-3.6	4/16
	12/05	1.30	1.42	-8.5	4/15
	12/05	1.29	1.30	-0.8	4/16
Southwest Air	12/03	0.27	0.29	-6.9	4/13
Sprint PCS Group	12/03	-0.44	-0.43	-2.3	4/14
Superior Industries Intl	12/03	3.05	3.25	-6.2	4/11
Tellabs Inc.	12/03	-0.21	-0.11	-90.9	4/16
	12/04	0.02	0.04	-50.0	4/16
Texas Instruments	12/03	0.39	0.41	-4.9	4/16
Triton PCS Holdings Inc.	12/03	-1.69	-1.56	-8.3	4/14
	12/04	-1.60	-1.49	-7.4	4/14
Verizon Communications	12/04	2.56	2.62	-2.3	4/15
	12/05	2.55	2.67	-4.5	4/15
Vulcan Materials Co	12/03	1.85	1.97	-6.1	4/15
	12/04	2.27	2.40	-5.4	4/15

Economic Forecast

UBS Warburg U.S. Economic Forecast
Seasonally adjusted at annual rates, except where noted, as of 4/11/03, in percent

	2002		2003				Annual change			4Q/4Q change		
	3QA	4QA	1QE	2QE	3QE	4QE	2002A	2003E	2004E	2002A	2003E	2004E
Real GDP (Chain)	**4.0**	**1.4**	**1.5**	**2.5**	**4.5**	**3.5**	**2.4**	**2.5**	**3.2**	**2.9**	**3.0**	**3.0**
Personal consumption expenditures	4.2	1.7	1.9	1.9	4.4	3.2	3.1	2.5	2.8	2.7	2.9	2.5
Durable goods	22.8	-8.2	1.0	0.0	8.1	3.5	7.3	2.5	3.0	1.9	3.1	2.3
Nondurable goods	1.0	5.1	3.0	2.5	5.1	3.3	3.2	3.1	3.0	3.4	3.5	2.5
Services	2.3	2.2	1.5	2.1	3.1	3.1	2.2	2.2	2.7	2.5	2.5	2.5
Fixed investment	-0.3	4.4	0.7	0.9	4.6	6.5	-3.1	2.0	5.0	0.6	3.2	5.1
Business fixed investment	-0.8	2.3	-1.9	1.2	6.3	9.7	-5.7	1.3	8.0	-1.7	3.7	8.5
Equipment & software	6.7	6.2	-1.0	2.8	7.5	11.5	-1.7	4.1	9.5	3.3	5.1	10.0
Structures	-21.3	-9.9	-6.0	-6.0	0.0	0.0	-16.4	-8.6	-0.4	-15.9	-3.0	0.0
Residential	1.0	9.4	9.0	0.0	0.0	-2.5	3.9	4.0	-3.6	6.7	1.5	-5.0
Government purchases	2.9	4.6	1.5	6.0	2.7	3.1	4.4	3.3	2.5	3.6	3.3	2.1
Federal	4.3	11.0	2.5	15.0	4.0	4.0	7.5	7.1	3.4	7.5	6.3	2.2
State & Local	2.2	1.2	1.0	1.0	2.0	2.5	2.8	1.2	2.0	1.6	1.6	2.0
Net exports ($ bil.)	-488.0	-532.2	-528.5	-533.5	-557.2	-569.1	-488.5	-547.1	-547.4	-532.2	-569.1	-544.1
Exports	4.7	-5.8	3.7	6.8	9.6	7.2	-1.6	4.1	8.3	3.9	6.8	9.0
Imports	3.3	7.4	1.5	5.8	12.6	7.7	3.7	6.6	5.5	10.1	6.8	4.5
Change in inventories ($ bil.)	18.8	25.8	16.2	20.4	44.9	44.8	5.2	31.5	19.8	25.8	44.8	29.8
Real domestic purchases	3.9	2.9	1.2	2.6	5.2	3.7	3.0	2.9	3.0	3.7	3.2	2.7
Final sales	3.4	1.1	1.9	2.4	3.4	3.4	1.8	2.2	3.3	1.7	2.8	3.2
Domestic final sales	3.3	2.6	1.6	2.5	4.2	3.7	2.4	2.6	3.1	2.5	3.0	2.8
Net exports contribution (pct pts)	0.2	-1.5	0.2	-0.1	-0.7	-0.2	-0.6	-0.4	0.2	-0.8	-0.2	0.4
Inventory contribution (pct pts)	0.6	0.3	-0.4	0.2	1.1	0.1	0.7	0.3	-0.1	1.2	0.3	-0.2
Nominal GDP	5.1	3.2	4.2	3.9	5.6	5.1	3.6	4.2	4.6	4.3	4.7	4.6
Key business indicators												
FRB industrial production index	3.4	-2.9	0.9	2.4	7.8	4.9	-0.7	2.1	5.0	1.5	4.0	5.2
Capacity utilization rate (%)	76.2	75.4	75.4	75.7	76.9	77.5	75.6	76.4	79.1	75.4	77.5	80.4
Civilian unemployment rate (%)	5.8	5.9	5.8	6.0	6.1	6.0	5.8	6.0	5.8	5.9	6.0	5.7
Housing starts (millions)	1.70	1.76	1.75	1.60	1.55	1.50	1.71	1.60	1.50	1.76	1.50	1.50
Current account balance ($ bil)	-126	-137	-138	-140	-147	-152	-503	-577	-599	-547	-607	-602
Inflation												
GDP Chain Price Index	1.0	1.8	2.7	1.3	1.0	1.5	1.1	1.7	1.4	1.3	1.6	1.5
CPI-U*	2.2	2.0	3.4	2.0	1.2	2.2	1.6	2.4	2.2	2.2	2.2	2.4
Core CPI-U*	2.2	1.8	2.0	2.3	2.5	2.5	2.3	2.1	2.5	2.1	2.3	2.5
PCE Chain Price Index	1.7	1.8	2.8	1.4	0.6	1.6	1.4	1.9	1.5	1.8	1.6	1.7
Core PCE Chain Price Index	1.8	1.5	1.4	1.7	1.9	1.9	1.7	1.7	1.9	1.7	1.7	1.9
PPI-finished goods*	0.2	2.8	9.7	0.1	-6.7	0.4	-1.3	2.1	0.3	1.0	0.7	1.7
Income indicators												
Average hourly earnings	3.2	3.5	3.1	3.2	3.4	3.5	3.2	3.2	3.5	3.0	3.3	3.6
Nonfarm business compensation	5.4	4.6	4.1	4.2	4.4	4.5	2.8	4.4	4.5	4.2	4.3	4.6
Employment cost index	3.3	3.0	3.9	4.0	4.2	4.3	3.7	3.8	4.3	3.4	4.1	4.4
Real disposable income	3.1	2.6	1.8	2.8	3.3	2.4	4.5	2.6	2.5	5.9	2.6	2.3
Saving rate	3.8	4.3	4.3	4.5	4.2	4.0	3.9	4.3	4.0	4.3	4.0	3.9
Memo: Nonfarm business productivity	5.5	-0.2	1.4	2.5	4.0	2.2	4.7	2.2	2.1	3.9	2.5	1.9

* CPI and PPI are computed on a quarterly average basis.
Source: U.S. Department of Commerce, Federal Reserve Board, U.S. Bureau of Labor Statistics, and UBS Warburg LLC estimates

Interest Rates
Percent, as of 4/11/03

	2002				2003				Annual			
	1QA	2QA	3QA	4QA	1QA	2QE	3QE	4QE	2001A	2002A	2003E	2004E
Federal funds rate	1.8	1.8	1.8	1.3	1.3	1.3	1.3	1.8	3.9	1.7	1.4	2.6
3-month T-bill rate (bond-equivalent yield)	1.8	1.7	1.6	1.2	1.1	1.5	1.8	2.2	3.5	1.6	1.7	3.1
2-year government notes	3.7	2.9	1.7	1.6	1.5	2.0	2.4	2.9	3.8	2.6	2.2	3.6
10-year government notes	5.4	4.9	3.6	3.8	3.8	4.1	4.4	4.6	5.0	4.6	4.2	4.9

Note: Quarterly forecasts are for end of period yields.
Source: Federal Reserve Board, and UBS Warburg LLC estimates

UBS Warburg Economic Outlook
As of 4/11/03

	2001A	2002A	2003E	2004E
	4Q/4Q percent change			
Nominal GDP	2.0	4.3	4.7	4.6
GDP Chain Price Index	2.0	1.3	1.6	1.5
Real GDP (chain)	0.1	2.9	3.0	3.0
CPI-U	1.9	2.2	2.2	2.4

Summary of Upcoming Economic Indicators

Date	Time in GMT	Indicator	Forecast	Previous	Consensus
21-Apr-2003	14:00	Leading Economic Indicators (Mar)	-0.2%	-0.4%	-0.2%
22-Apr-2003	11:45	UBSW/BTM Weekly Store Sales (Apr 19)	n/a	1.3%	n/a
22-Apr-2003	12:40	Redbook Store Sales (Apr 19)	n/a	4.4%	n/a
23-Apr-2003	18:00	Fed's Beige Book	n/a	n/a	n/a
24-Apr-2003	12:30	Initial Jobless Claims (Apr 19)	420 k	442 k	425 k
24-Apr-2003	12:30	Durable Goods Orders (Mar)	-1.5%	-1.6%	-0.6%
24-Apr-2003	12:30	Durable Goods excl. Trans (Mar)	-1.5%	-2.7%	0.2%
24-Apr-2003	14:00	Help Wanted Index (Mar)	n/a	40	40
25-Apr-2003	12:30	Gross Domestic Product (Q1 03 Advance)	1.5%	1.4%	2.3%
25-Apr-2003	12:30	GDP Prices (Q1 03)	2.0%	1.8%	1.9%
25-Apr-2003	13:45	Univ. of Michigan Sentiment (Apr, final)	84.5	83.2	85.0
25-Apr-2003	14:00	New Home Sales (Mar)	925 k	854 k	903 k
25-Apr-2003	14:00	Existing Home Sales (Mar)	5.65 mil	5.84 mil	5.70 mil

S&P Earnings Outlook

UBS Warburg Estimates for S&P Earnings

	$	Operating earnings per share $												
	Price			**Est**		**Est**		**Est**	P/E ratio		Dividend $		Yield %	
	04 15 03	**2000**	**2001**	**chg**	**2002E**	**chg**	**2003E**	**chg**	**2002E**	**2003E**	**2002E**	**2003E**	**2002E**	**2003E**
S&P Industrials	1014.98	60.61 A	46.25 A		48.24		50.00		21.0	20.3	16.19	17.20	1.6%	1.7%
S&P 500	890.81	56.42 A	45.22 A		48.00		50.00		18.6	17.8	15.92	17.32	1.8%	1.9%

S&P Earnings

	S&P 500					S&P Industrials				
	Reported EPS	**Change yr/yr**	**Add back major writeoffs**	**Operating EPS**	**Change yr/yr**	**Reported EPS**	**Change yr/yr**	**Add back major writeoffs**	**Operating EPS**	**Change yr/yr**
2001 Q1 A	9.18	-33.2%	3.14	12.32	-10.3%	8.75	-39.0%	3.47	12.22	-15.7%
Q2 A	4.83	-64.2%	6.78	11.61	-21.1%	2.71	-82.3%	9.44	12.15	-24.5%
Q3 A	5.23	-61.9%	5.55	10.78	-25.0%	3.97	-72.3%	6.93	10.90	-27.8%
Q4 A	5.45	-39.9%	5.06	10.51	-22.6%	4.39	-55.4%	6.59	10.98	-26.5%
Year	24.69	-50.6%	20.53	45.22	-19.9%	19.82	-63.2%	26.43	46.25	-23.7%
2002 Q1 A	9.19	0.1%	2.10	11.29	-8.4%	7.95	-9.1%	2.86	10.81	-11.5%
Q2 A	6.89	42.7%	5.46	12.35	6.4%	5.84	115.5%	6.89	12.73	4.8%
Q3 A	8.83	68.8%	3.45	12.28	13.9%	9.15	130.5%	3.00	12.15	11.5%
Q4	3.46	-36.5%	8.62	12.08	14.9%	6.55	49.2%	6.00	12.55	14.3%
Year	28.37	14.9%	19.63	48.00	6.1%	29.49	48.8%	18.75	48.24	4.3%
2003 Q1	10.55	14.8%	1.00	11.55	2.3%	10.50	32.1%	1.00	11.50	6.4%
Q2	11.33	64.4%	1.14	12.47	1.0%	11.25	92.6%	1.25	12.50	-1.8%
Q3	11.80	33.6%	1.14	12.94	5.4%	11.60	26.8%	1.25	12.85	5.8%
Q4	10.42	201.2%	2.62	13.04	7.9%	10.65	62.6%	2.50	13.15	4.8%
Year	44.10	55.4%	5.90	50.00	4.2%	44.00	49.2%	6.00	50.00	3.6%

We would use reported EPS (the only EPS released by S&P) to assess the level of S&P earnings and to calculate P/Es because write-offs are a negative that should not be ignored. But operating earnings are a better measure of changes in earnings because write-offs vary so much from quarter to quarter.

Market Performance

Stock Market Performance (as of 4/16/03 for selected S&P 500 industry groups)
Average change in market capitalization of companies in group with EQUAL WEIGHT for each company in group

	% of S&P 500	WEEK	QTD	YTD	2002
S&P 500		1.0	3.7	0.0	–23.4
DJII		0.4	3.3	–1.0	–16.8
Basic materials					
Agricultural products	0.1	0.5	6.9	–7.0	–15.5
Aluminum	0.2	5.3	15.4	–1.7	–36.3
Chemicals	1.3	2.2	3.7	–4.0	–9.0
Chemicals — diversified	0.1	–0.4	2.2	–6.5	–7.7
Chemicals — specialty	0.2	2.6	2.2	–3.1	16.9
Containers & packaging — paper	0.1	1.1	2.8	–9.2	3.3
Construction — cement&aggreg	0.0	0.0	4.0	–16.1	–21.6
Gold & precious metals mining	0.1	4.3	2.7	5.5	172.9
Iron & steel	0.1	4.8	10.5	–9.0	–23.1
Metals mining	0.1	–0.1	4.1	6.5	40.4
Paper & forest products	0.5	0.7	1.2	–4.3	–9.5
Capital goods sector					
Aerospace/defense	0.9	1.0	0.1	–19.8	9.1
Containers — metal & glass	0.0	–1.1	0.7	9.9	50.2
Electrical equipment	4.1	1.6	8.5	11.8	–38.1
Engineering & construction	0.0	0.0	5.9	22.2	–32.6
Machinery — diversified	0.5	–1.7	3.5	–1.9	–6.9
Manufacturing — diversified	2.3	–0.2	3.7	–5.4	–31.4
Manufacturing — specialized	0.2	–3.9	–3.2	–1.5	–13.0
Office equipment & supplies	0.1	0.2	4.4	1.1	–15.8
Trucks & parts	0.1	3.6	10.2	15.2	–8.9
Waste management	0.2	1.0	0.2	–10.8	–30.2
Communications services					
Telecom — cellular/wireless	0.4	–3.1	–8.4	7.1	–55.1
Telecom — long distance	0.3	–3.4	–10.7	–37.3	34.0
Telephone	2.9	–2.5	–1.3	–17.7	–27.8
Consumer cyclicals					
Automobiles	0.5	8.0	11.9	–3.1	–31.8
Auto parts & equipment	0.2	0.9	7.4	–6.6	–34.1
Building materials	0.2	0.8	5.0	–4.9	–4.0
Consumer — jewelry,nvlties,gifts	0.0	4.4	7.0	–11.2	11.9
Footwear	0.1	–0.8	1.1	15.6	–17.1
Gaming, lottery,parimutuel co	0.1	0.1	–3.1	–4.2	8.4
Hardware & tools	0.1	3.7	1.0	–25.1	–6.8
Homebuilding	0.1	1.0	7.9	14.8	–1.3
Household furn. & appliances	0.1	–0.8	1.1	15.6	–17.1
Leisure time — products	0.5	2.7	3.6	7.7	–10.8
Lodging — hotels	0.4	2.6	7.4	3.1	–11.7
Photography/imaging	0.2	0.8	4.2	–3.6	0.5
Publishing	0.2	2.4	5.1	–4.4	1.2
Publishing — newspapers	0.6	2.2	5.4	1.9	7.6
Retail — building supplies	1.3	2.7	9.2	12.9	–44.0
Retail — computers&electronics	0.2	1.2	10.2	19.6	–51.0
Retail — department stores	0.5	–0.4	0.8	–4.9	–23.2
Retail — discounters	0.1	2.0	10.5	7.6	–9.7
Retail — general merchandise	3.8	–0.4	5.3	8.0	–17.5
Retail — specialty	0.5	0.6	6.7	2.2	–11.0
Retail — specialty — apparel	0.4	0.0	7.7	–0.6	31.3
Services — advertising/marketing	0.2	2.2	11.5	–10.8	–41.9
Services — commercial&consumer	0.9	–0.6	1.8	11.4	–13.7
Textiles — apparel	0.1	0.8	0.9	–5.4	18.9
Energy sector					
Oil & gas — explor&prod'n	0.7	–0.9	–2.0	–0.4	1.1
Oil & gas — refining&marketing	0.1	0.6	0.3	8.0	–26.8
Oil — domestic integrated	0.7	–0.4	–1.1	6.1	15.2
Oil — international integrated	3.8	–0.2	–1.0	–2.0	–16.0
Oil & gas — drilling&equipment	0.8	–4.9	–2.7	–6.7	–11.4

	% of S&P 500	WEEK	QTD	YTD	2002
S&P Industrial		0.5	2.7	–0.3	–24.6
NYSE		0.8	3.5	–1.0	–19.8
Consumer staples					
Beverages — alcoholic	0.6	0.0	1.3	–4.9	4.2
Beverages — nonalcoholic	2.3	–1.9	–0.5	–8.7	–8.7
Broadcasting — tv, radio,&cable	0.9	1.4	7.2	16.0	59.1
Distributors — food&health	0.8	0.6	1.5	–5.6	–8.9
Entertainment	1.3	0.5	7.9	1.9	–13.0
Foods	1.2	–0.7	1.4	–8.8	–2.2
Household products — non dur	2.3	0.6	1.0	3.5	–0.4
Housewares	0.2	–0.4	4.7	–2.5	11.0
Personal care	0.6	–0.9	–0.8	1.1	–2.8
Restaurants	0.6	0.1	4.5	3.6	–22.4
Retail — drug stores	0.5	–2.0	2.3	2.0	–13.5
Retail — food chains	0.3	–6.1	–3.0	–19.3	–37.7
Specialty printing	0.1	2.4	5.2	–9.1	–17.7
Tobacco	0.9	4.9	5.9	–22.4	–15.6
Services — employment	0.0	2.8	5.6	–14.1	–40.4
Health care sector					
Biotechnology	1.3	1.8	2.7	18.9	–10.1
Health care — diversified	3.9	–3.6	–4.4	–1.7	–29.3
Health care — drugs — major pharm	5.5	–0.4	1.1	0.7	–19.6
Health care — hospital mgmt	0.3	–15.9	–25.3	–27.1	–21.3
Health care — drugs generic&othe	0.1	–2.7	–8.9	–24.3	–47.7
Health care — long term care	0.0	0.0	3.1	4.3	–26.1
Health care — managed care	0.6	–1.9	–1.7	5.1	–3.4
Health care — medical prod&supp	1.9	–2.3	0.1	–0.1	–12.7
Health care — specialized srves	0.3	–1.1	–2.7	7.2	18.4
Technology sector					
Communications equipment	0.9	–0.3	–3.8	0.3	–46.4
Computers — hardware	3.6	3.1	4.7	4.7	–27.3
Computers — networking	0.1	5.4	19.2	27.0	–60.3
Computers — peripherals	0.3	6.3	11.4	28.2	–43.6
Computers — software&services	5.9	1.5	4.9	–0.5	–33.0
Electronics — component dist	0.1	1.1	5.9	–11.7	5.0
Electronics — defense	0.1	0.0	–1.3	–8.2	–1.7
Electronics — instrumentation	0.1	2.7	8.1	–13.6	–42.2
Electronics — semiconductors	2.8	8.3	11.4	16.7	–50.7
Equipment — semiconductor	0.5	4.1	8.5	6.4	–34.9
Services — computer system	0.2	8.2	0.6	–2.0	–62.8
Services — data processing	0.9	3.8	4.6	–6.5	–26.9
Transportation					
Air freight	0.2	3.5	5.6	7.4	4.5
Airlines	0.5	1.9	3.1	0.2	–46.8
Railroads	0.5	3.1	7.0	1.0	–2.4
Truckers	0.0	7.4	6.7	–2.6	4.2
Utilities					
Electric companies	2.5	2.0	2.9	–1.3	–17.0
Natural gas	0.4	3.1	5.4	11.0	–56.2
Power producers — independent	0.1	4.3	21.6	39.6	–79.2
Financial					
Banks — major regional	4.9	1.6	5.0	–2.4	–10.8
Banks — money center	1.4	0.8	7.4	3.5	5.1
Consumer finance	0.5	9.1	14.7	3.0	–17.4
Financial — diversified	7.0	3.5	9.8	7.3	–20.9
Insurance brokers	0.4	2.8	7.2	1.3	–21.5
Insurance — life/health	0.8	1.7	6.2	2.5	–17.8
Insurance — multiline	2.0	0.0	6.9	–8.9	–26.7
Insurance — property — casualty	1.3	3.1	9.1	3.7	–10.5
Investment management	0.2	1.3	5.9	2.8	–25.3
Investment banking/brokerage	1.3	3.4	10.8	7.5	–25.0
Savings & loan companies	0.7	1.0	2.5	2.9	14.7

Global ratings: Definitions and allocations

UBS rating	Definition	UBS rating	Definition	Rating category[1]	Coverage[2]	IB services[3]
Buy 1	Excess return potential > 15%, smaller range around price target	**Buy 2**	Excess return potential > 15%, larger range around price target	**Buy**	47%	35%
Neutral 1	Excess return potential between -15% and 15%, smaller range around price target	**Neutral 2**	Excess return potential between -15% and 15%, larger range around price target	**Hold/Neutral**	47%	32%
Reduce 1	Excess return potential < -15%, smaller range around price target	**Reduce 2**	Excess return potential < -15%, larger range around price target	**Sell**	6%	26%

Excess return: Target price / current price - 1 + gross dividend yield - 12-month interest rate. The 12-month interest rate used is that of the company's country of incorporation, in the same currency as the predicted return.

1: UBS Buy 1/Buy 2 = Buy; UBS Neutral 1/Neutral 2 = Hold/Neutral; UBS Reduce 1/Reduce 2 = Sell.

2: Percentage of companies under coverage globally within this rating category.

3: Percentage of companies within this rating category for which investment banking (IB) services were provided within the past 12 months.

4: Closed-end funds ratings and definitions are: Buy: Higher stability of principal and higher stability of dividends; Neutral: Potential loss of principal, stability of dividend; Reduce: High potential for loss of principal and dividend risk.

Source: UBS AG, its subsidiaries and affiliates; as of 31 March 2003.

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Companies mentioned

Company Name	Reuters	Rating	Price*
Accenture Ltd.[3b,10]	ACN.N	Buy 2	US$14.40
Andrx Group[1,3a]	ADRX.O	Buy 2	US$14.70
Bear Stearns[3c]	BSC.N	Neutral 2	US$68.29
BellSouth Corp.[3c,10]	BLS.N	Neutral 1	US$22.08
Citigroup[3a,3b,10]	C.N	Buy 2	US$38.26
CompuCredit Corp.[1,3c]	CCRT.O	Reduce 2	US$7.00
General Motors Corp.[3b,7,8,10]	GM.N	Buy 2	US$35.06
Goldman Sachs[3a]	GS.N	Neutral 2	US$75.20
Hilton Hotels Corp.[3b,10]	HLT.N	Neutral 2	US$12.53
Intel Corp.[1]	INTC.O	Buy 2	US$18.16
Juniper Networks[1,3c]	JNPR.O	Buy 2	US$9.88
Lehman Brothers[3b,10]	LEH.N	Neutral 2	US$62.75
Marriott Intl.[10]	MAR.N	Neutral 1	US$34.09
MBNA Corp.[3b]	KRB.N	Reduce 2	US$17.49
Merrill Lynch & Co.[3a]	MER.N	Buy 2	US$39.75
Millennium Pharm.[1]	MLNM.O	Neutral 2	US$8.50
Millipore Corp.[3a]	MIL.N	Buy 1	US$31.22
Morgan Stanley[3b]	MWD.N	Buy 2	US$44.19
Salix Pharm.[1,3b,10]	SLXP.O	Neutral 2	US$10.40
SBC Communications[3a,7,10]	SBC.N	Neutral 1	US$20.29
Starwood Hotels[10]	HOT.N	Neutral 2	US$25.15
Timberland Co.	TBL.N	Buy 2	US$47.84
US Bancorp[3a,3b,6,9a,10,12]	USB.N	Buy 2	US$21.35

Company Name	Reuters	Rating	Price*
Verizon[3a,3b,10]	VZ.N	Neutral 1	US$33.33
Vodafone Group[3b,8,9b,10,12]	VOD.L	Neutral 1	122p
WCI Communities[3a,10]	WCI.N	Buy 2	US$11.70

* As of April 16, 2003. Source: UBS AG, its subsidiaries and affiliates.

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Unless otherwise indicated, please refer to the Valuation and Risk sections within the body of this report.

For a complete set of disclosure statements associated with the companies discussed in this report, including information on valuation and risk, please contact UBS Warburg LLC, 1285 Avenue of Americas, New York, NY 10019, USA, Attention: Publishing Administration.

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