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U.S. ECONOMIC UPDATE

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RISK MANAGEMENT UPDATE

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MONTHLY STATISTICAL REVIEW

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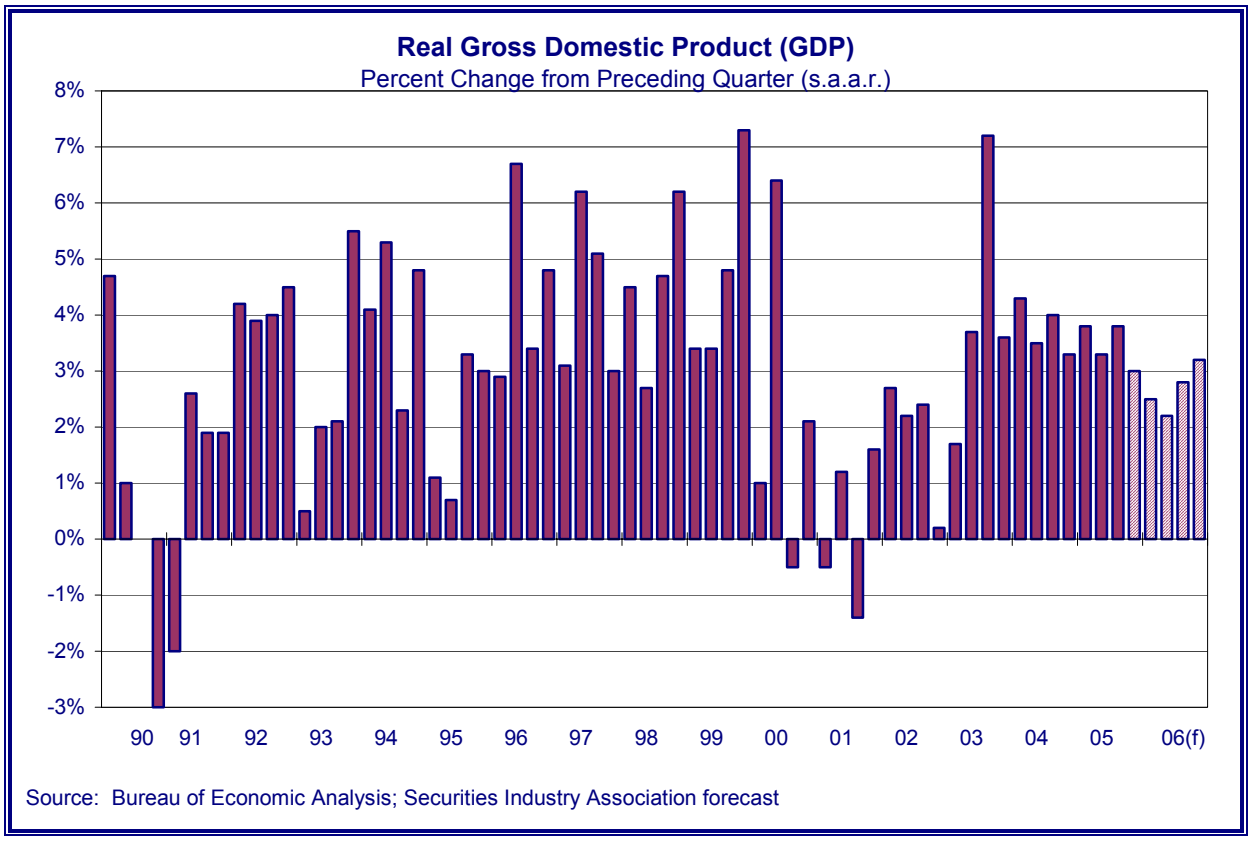
U.S. ECONOMIC UPDATE

Summary

The current economic expansion, now nearly four years old, showed surprising resilience and significant momentum in 3Q'05, largely shrugging off the impact of the hurricanes which devastated much of the Gulf Coast. However, signs of weakness have appeared, and growth in the final three months of 2005 will be lower than in 3Q'05 and for the year as a whole, real GDP growth of 3.6%, will be below last year's level of 4.2%. Further deceleration in 2006 is anticipated, as consumers retrench in lagged response to steadily rising interest rates, sharp, sustained increases in fuel costs, and the end of the housing boom. The waning of strong fiscal stimuli and reduced net foreign inflows will further constrain growth. Even so, growth of the U.S. economy is expected to remain above its long-run average of 2.6%. Expectations of deepening imbalances, rising inflation, higher volatility, and increased frequency and severity of extreme events could dampen consumer and investor confidence further and pose risks to benign forecasts.

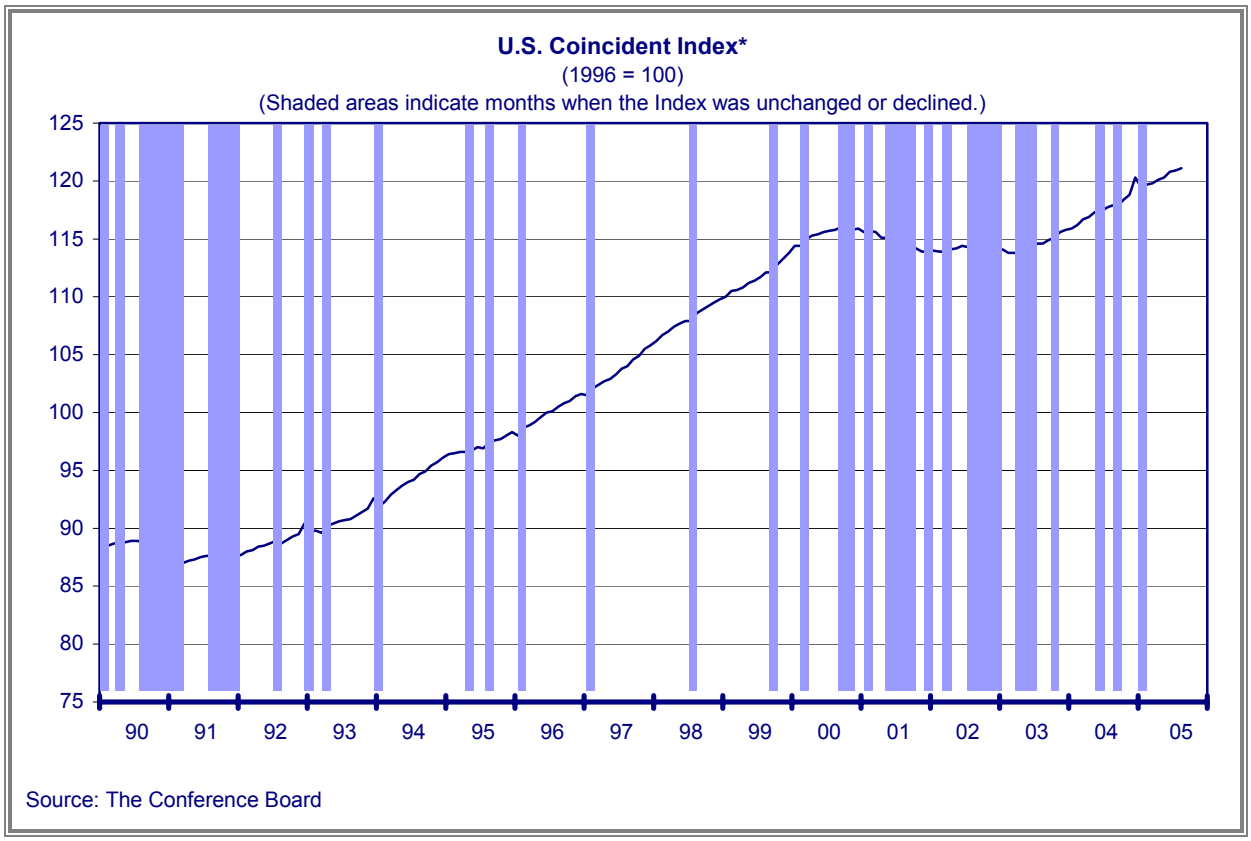


Third Quarter Update: Weathering the Storms

After an unseasonably strong August, economic activity continued to expand in September at a pace described as moderate or gradual for most regions of the country,[1] and appeared largely unaffected by the disruption to the Gulf Coast region. Retail sales increased, though less than

[1] The New York region reported a slowdown. See the Federal Reserve Board, The Beige Book, October 19, 2005 (www.federalreserve.gov/fomc/beigebook/2005/20051019/default.htm).

expected in a number of markets, and despite a generalized drop in auto sales. Real estate markets remained strong, and new construction surged[2] even as demand for homes appeared to level off. Consumer sentiment slumped in August and September and durable goods orders, which fell 2.1% in September, may portend weaker consumer spending in the months ahead. However, it should be noted that consumer sentiment and actual consumption are often quite distinct. Current signs of weakness could prove as transient as similar, recent episodes, when monthly coincident indicators were flat or negative (see below).



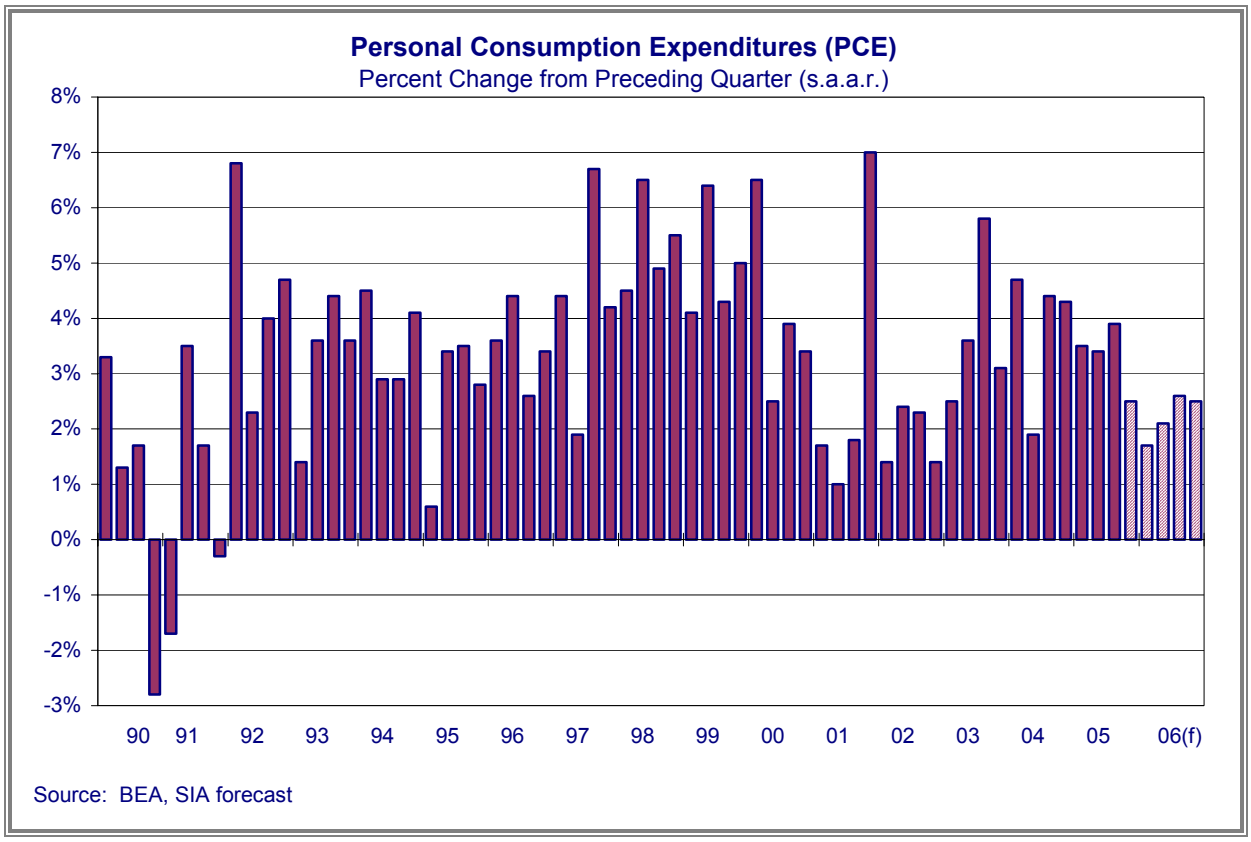
In September, employment growth outside the areas directly affected by Hurricane Katrina continued at about the same pace as over the past 12 months, 194,000 jobs per month. Steadily rising employment began to cause tightening in some labor markets, but only moderate upward pressure on wages is apparent, and only in highly skilled and certain service-sector jobs. Cost increases for energy, petroleum-based products, building materials, and shipping began to impact retail prices, but only in a very subdued fashion. Gasoline prices have returned to where they were before Katrina appeared on radar screens, but have already influenced consumer spending. Real personal consumption expenditures (PCE) fell 0.4% in September after a 1.0% decline in August, the first back-to-back monthly declines in 15 years.[3] Higher natural gas prices and home heating costs are likely to trim consumption and pressure retail prices further.

[2] The U.S. Department of Commerce reported 183,000 new housing starts in September, a pace above expectations and the strongest September in three decades, which raised the number of starts in the past 12 months above 2 million, similar to the apex of the boom that peaked in November 1978, but still below the record peak reached in November 1972.

[3] U.S. Department of Commerce, Bureau of Economic Analysis, Personal Income and Outlays: September 2005, October 31, 2005 (www.bea.gov/bea/newsrelarchive/2005/pi0905.pdf).

* The Coincident Index is made up of the following four components: (1) employees on nonagricultural payrolls; (2) personal income less transfer payments; (3) industrial production; and, (4) manufacturing and trade sales.

Despite some signs of weakness, real GDP grew 3.8% in 3Q'05, up from 3.3% in 2Q'05 and matching the pace of the first quarter of this year.[4] During the quarter the U.S. economy showed considerable near-term momentum and remarkable resiliency despite the impact of devastating hurricanes.[5] Notwithstanding rapidly rising energy prices, private consumption spending increased 3.9% in 3Q'05, an above-average and still-accelerating pace, up from a 3.4% rate in 2Q'05 and matching the growth rate observed for all of 2004.



Business investment increased, although at a pace both below expectations and below the average in the ongoing expansion.[6] Residential housing, where "signs of a slowdown are still quite tentative"[7] in response to tighter lending conditions and declining expectations for rapid home price appreciation, grew 4.8% after expanding at a 10% annualized rate in the first half of the year. Government spending grew 3.2% in real terms, up from a 2.5% pace in 2Q'05, led by a 10.2% jump in national defense outlays. Inventory liquidations shaved more than half of one (0.55) percentage point from overall real economic growth in 3Q'05, but were less of a drag than

[4] All rates of growth in GDP and its components are the percent change from the preceding period at seasonally adjusted annual rates (s.a.a.r.) and expressed in "real" or chained (2000) dollars.

[5] The Federal Reserve Board, Economic Outlook for the United States: Remarks by Vice Chairman Roger W. Ferguson, Jr. to the Metropolitan Trenton African American Chamber of Commerce, Trenton, New Jersey, October 18, 2005 (www.federalreserve.gov/boarddocs/speeches/2005/20051018/default.htm).

[6] Business investment (non-residential fixed investment) rose in each of the preceding nine quarters (2Q'03 - 2Q'05), at an average annualized real rate of 6.9%. This followed nine consecutive quarters of declines (1Q'01 - 1Q'03), which averaged 7.2% at an annualized real rate over that period. During 3Q'05 growth slowed to 6.2% (s.a.a.r), down from 8.8% in 2Q'05.

[7] The Federal Reserve Board, The Economic Outlook: Remarks by Governor Donald L. Kohn at the 2006 Global Economic and Investment Outlook Conference, Carnegie-Mellon University, Pittsburgh, Pennsylvania, October 19, 2005 (www.federalreserve.gov/boarddocs/speeches/2005/20051019/default.htm).

in the prior quarter.[8] This inventory change, along with the estimate for imports (unchanged relative to 2Q'05), will likely be revised up once final September numbers are available.[9] Export growth slowed, as did state and local government spending.

Consumer prices jumped 1.2% in September after 0.5% increases in both July and August, and are up 9.4% at a seasonally adjusted annual rate (s.a.a.r.) in the third quarter and 5.1% year-to-date at an annual rate.[10] Despite this marked jump in both the "headline" rate of consumer price inflation and in near-term inflationary expectations, core rates of inflation (excluding food and fuel) moved up only slightly in 3Q'05. This core rate rose at a 1.4% pace in 3Q'05, following increases of 3.3% and 1.2% in the first two quarters of this year, and is up only 2.0% for the first nine months of 2005 compared to a 2.2% rise for all of 2004. The index for energy prices rose 3.8% in July, 5.0% in August and 12.0% in September. Over the first nine months of 2005, energy prices were up 42.5% after a 16.6% increase in all of 2004.

The Outlook for 4Q'05 and 2006: Moderation in Growth, Higher Interest Rates and a Modest Upturn in Inflation

There have been many drivers of the current expansion including: fiscal stimuli; accommodative monetary policy; above-average productivity growth; income growth augmented by household dissavings and strong wealth effects (increased indebtedness and high rates of home equity extraction); and, large foreign investment inflows. As 2005 comes to a close, the relative strength of each of these drivers will shape the near-term outlook.

Growth remains strong, both relative to the long-term historical average growth rate of 2.6% as well as to what one would expect at this stage of an economic expansion now nearly four years old.[11] Although the U.S. economic growth appears to be slowing in response to the fading of stimuli and to the impact of higher fuel costs and rising interest rates, these signs are not generalized. Take, for example, the different prospects for durable and non-durable goods. Motor vehicle output contributed nearly one-half (0.48) of a percentage point to 3Q'05 growth in real GDP. In October, motor vehicle sales tumbled to seven-year lows, reflecting both the end of deep discounts and the impact of higher gas prices. Meanwhile, sales of non-durable goods remained strong in October.

Overall, economic growth is expected to slow to 3.0% in 4Q'05 from 3.8% in 3Q'05, before decelerating further in 2006. Above average rates of productivity growth should persist, and large foreign inflows, while moderating, are expected to stay strong, forestalling any dramatic correction of large external imbalances. Less apparent are some of the expectations with regard to fiscal policy, monetary policy and the direction of the housing sector that underlie the forecast, which are considered below.

[8] The decrease in private inventory investment in 2Q'05 provided a negative contribution to real GDP growth equal to 2.14 percentage points at s.a.a.r.

[9] The GDP figures cited in this report for 3Q'05 are the "Advance" estimates, based on source data that are incomplete or subject to further revisions by the BEA. As more detailed and comprehensive data become available, "Preliminary" and "Final" estimates will be released at end-November and end-December, respectively.

[10] All rates of inflation are at seasonally adjusted annual rates unless otherwise noted.

[11] Measuring the start of current expansion from the trough of the last recession in November 2001.

Fiscal Policy

U.S. government receipts in fiscal year 2005 of $2,154 billion were 14.6% higher than the $1,880 billion in FY'04, which represented the greatest increase in receipts in over 20 years. The increase was led by a 47.0% jump in corporate income tax receipts, which rose to $278.3 billion from $189.4 billion, $88.9 billion above FY'04 levels and $55.8 billion better than budgeted. Outlays grew by 7.9% above the previous year ($2,473 billion vs. $2,293 billion). This increase was driven by growth in: five major agencies – the Departments of Agriculture, Defense (Military), Education, Homeland Security, and Veterans Affairs; net interest; and, Medicare. Altogether, these outlays grew by 12.6%, and accounted for $137 billion of the $180 billion increase in outlays over 2004. The total growth in outlays is somewhat reduced by slower growth rates in a number of other agencies and programs. Somewhat poorer results are expected in FY'06, as growth in corporate profits, which surged in the past two years, and powered the jump in corporate tax receipts in FY'05, is expected to slow, while growth of outlays continues, largely unabated.

Almost as troubling as the expectations of continued sizeable federal deficits are prospects that the fiscal stimulus provided by the 2003 tax cuts is beginning to wane, in part, due to the temporary nature of some of the cuts. Take, for example, the cut in tax rates on dividends and capital gains, which are among the measures slated to "sunset" first, and revert back to higher rates at end-2008. Delaying action or leaving the issue unresolved creates uncertainty for investors trying to plan ahead, which "could be costly" and could slow economic growth, according to incoming Federal Reserve Board Chairman Ben S. Bernanke, echoing earlier comments by current Fed Chairman Greenspan. Bernanke, speaking on behalf of the president (as head of the Council of Economic Advisors), at a hearing of the Joint Economic Committee in late October, urged Congress to reduce the federal deficit, cut government spending and make the Bush administration's recent tax cuts permanent. Making the dividend and capital gains tax cuts permanent is important, but is likely to be held hostage to passage of proposed spending cuts to reduce the deficit. However, those spending cuts are not expected to fully materialize, given the dilution of current Congressional efforts to cut spending and the diminishing likelihood of renewed fiscal discipline in the run-up to mid-term elections next year.

Monetary Policy

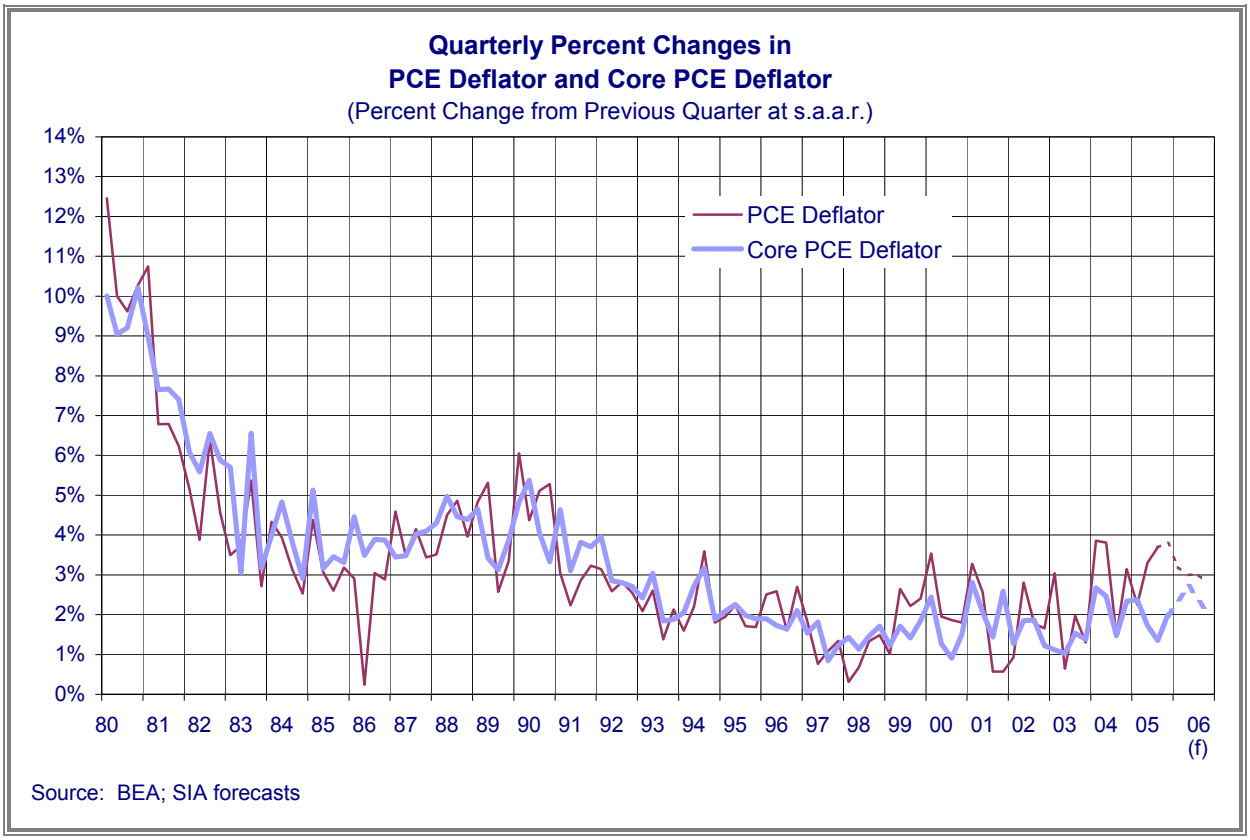
The nomination of Ben Bernanke to succeed Alan Greenspan as Chairman of the Board of Governors of the Federal Reserve was well received. Equity markets moved higher and bond prices declined slightly in response,[12] as market pundits saw, incorrectly we believe, Mr. Bernanke as a "dove" or relatively softer on fighting inflation than Mr. Greenspan. The Fed under Mr. Bernanke's stewardship, at least initially, is likely to provide substantial continuity with current policies, and continue to raise rates in response to the "price shock" posed by the sharp rise in energy prices.

The second major market preconception concerning Mr. Bernanke is that he is a strong proponent of inflation targeting. This is true, and the Fed has become more explicit about its inflation target, in part, due to his urgings. In February 2005, the Federal Reserve Board for the first time published its forecast for inflation for the coming two years rather than one,[13] and at

[12] The yield on the benchmark 10-year U.S. Treasury bond rose only 7 basis points in response to the announcement, compared to a 27-basis-point jump when Alan Greenspan was nominated to replace Paul Volker in 1987.

[13] Federal Reserve Board, Monetary Policy Report submitted to the Congress on February 16, 2005, Section 1, Monetary Policy and the Economic Outlook (www.federalreserve.gov/boarddocs/hh/2005/february/fullreport.htm).

the Federal Open Market Committee's February meeting, participants discussed the idea of explicitly setting an inflation target, something other central banks have done for some time but which the Fed has long resisted. FOMC participants[14] projected the core PCE price index[15] would increase between 1.5% and 1.75% both this year and next, roughly unchanged from the 1.6% increase from 4Q'03 to 4Q'04, which was the most recently available figure at that time, but below the 2004 annual average of 2.0%.



Perhaps it is fortunate that the Fed moved no closer to explicit inflation targeting at that time, since by late March the FOMC had to acknowledge stronger-than-expected price pressures during 1Q'05,[16] pressures that have persisted as inflation moved above the Fed's "comfort zone". The core-PCE price index rose 2.3% and 2.4%, respectively, during 4Q'04 and 1Q'05, before falling back to 1.7% in 2Q'05 and 1.3% in 3Q'05. "Prices for oil and natural gas have soared since 2003, directly boosting the energy component of the consumer price index as well as raising the production costs, and ultimately to at least some degree the prices, of non-energy goods and services."[17] Thus far, there has been only a limited impact on core rates of inflation.

The current low level and apparent stability of U.S. inflation suggests that the response of core inflation to energy prices has weakened over the past 20 years. This diminished response may owe as much to "the expectations formation process that has come about because the public perceives that inflation will remain low, perhaps because the monetary authority is now seen to

[14] The seven members of the Federal Reserve Board, the president of the New York Federal Reserve Bank, and four of the other eleven Federal Reserve Bank presidents (www.federalreserve.gov/FOMC/default.htm).

[15] The Personal Consumption Expenditure Price Index (excluding food and energy).

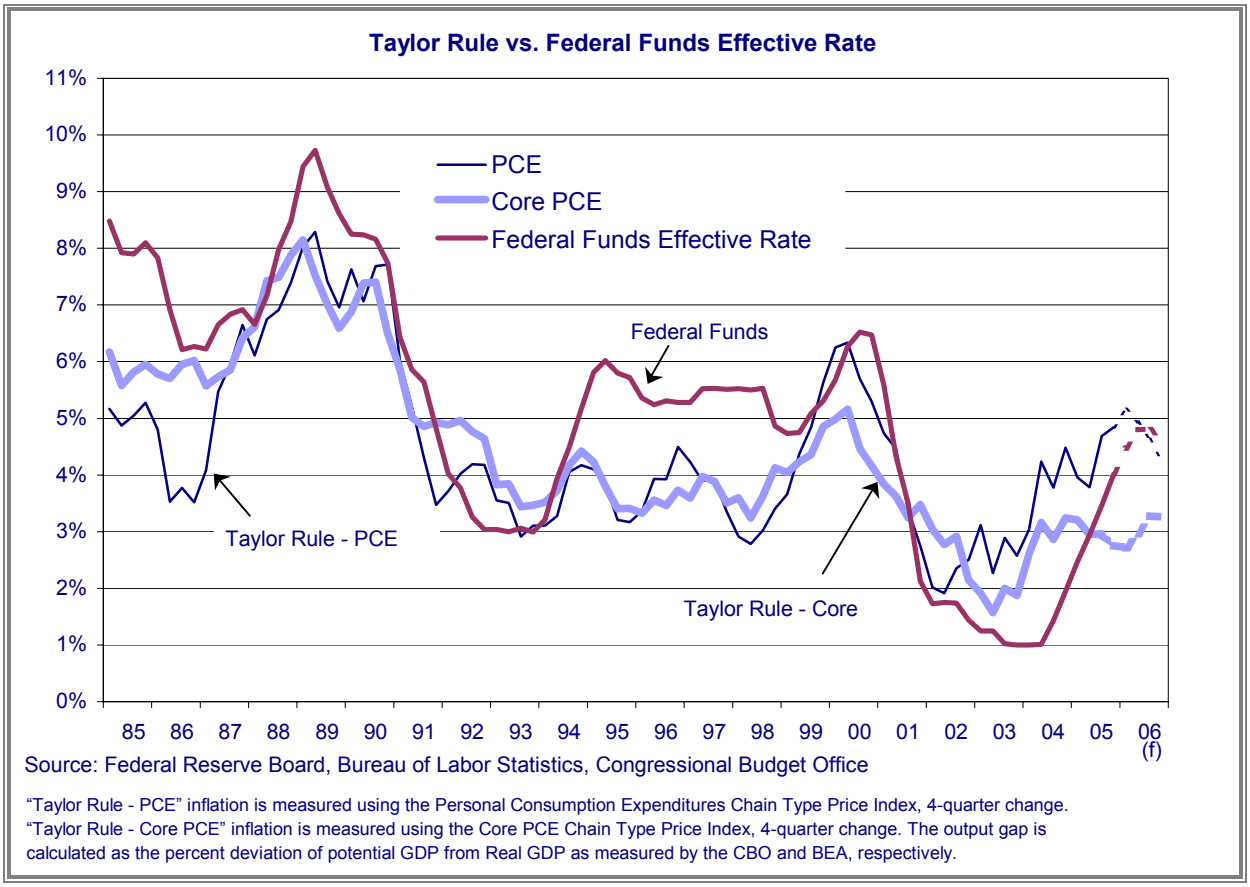
[16] Federal Reserve Press Release, FOMC statement and Board discount rate action, March 22, 2005 (www.federalreserve.gov/boarddocs/press/monetary/2005/20050322/).

[17] Inflation Modeling: A Policymaker's Perspective**,** Remarks by Governor Donald L. Kohn at the Quantitative Evidence on Price Determination Conference, Washington, D.C., September 29, 2005 (www.federalreserve.gov/boarddocs/speeches/2005/20050929/default.htm).

be more vigilant in reacting to price pressures" as it does to the reduced "persistence of energy price movements (since the 1970s) that has prompted firms to be less worried about passing temporary cost increases onto customers."[18]

Unfortunately the dampening influence of both these factors appears to have lessened in recent months. Current, higher fuel prices are now expected to persist, if not move still higher, in 2006. Increased concern that an acceleration of core rates of inflation will soon materialize in response to sustained, higher costs of energy and raw materials has led to an upward shift in both interest rate and inflationary expectations over the near-term. When "headline" and "core" rates of inflation diverge as they have done recently, they tend to converge with headline rates moving lower over time and core rates moving up.

In order to constrain such a move, "anchor" inflationary expectations, and uphold its "vigilant" reputation in reacting to these price pressures, the Fed has been indicating that interest rates will move higher than was anticipated just a few months ago, and the Fed Funds Futures rate rose in response. One indicator of how high the Fed Funds rate will go is to look at where that rate should be (in order to stabilize growth near its trend rate and control inflation over the long term) by following so-called "Taylor Rules".[19] Two simple forms of the rule, along with the effective Fed Funds rate, are shown in the chart below.

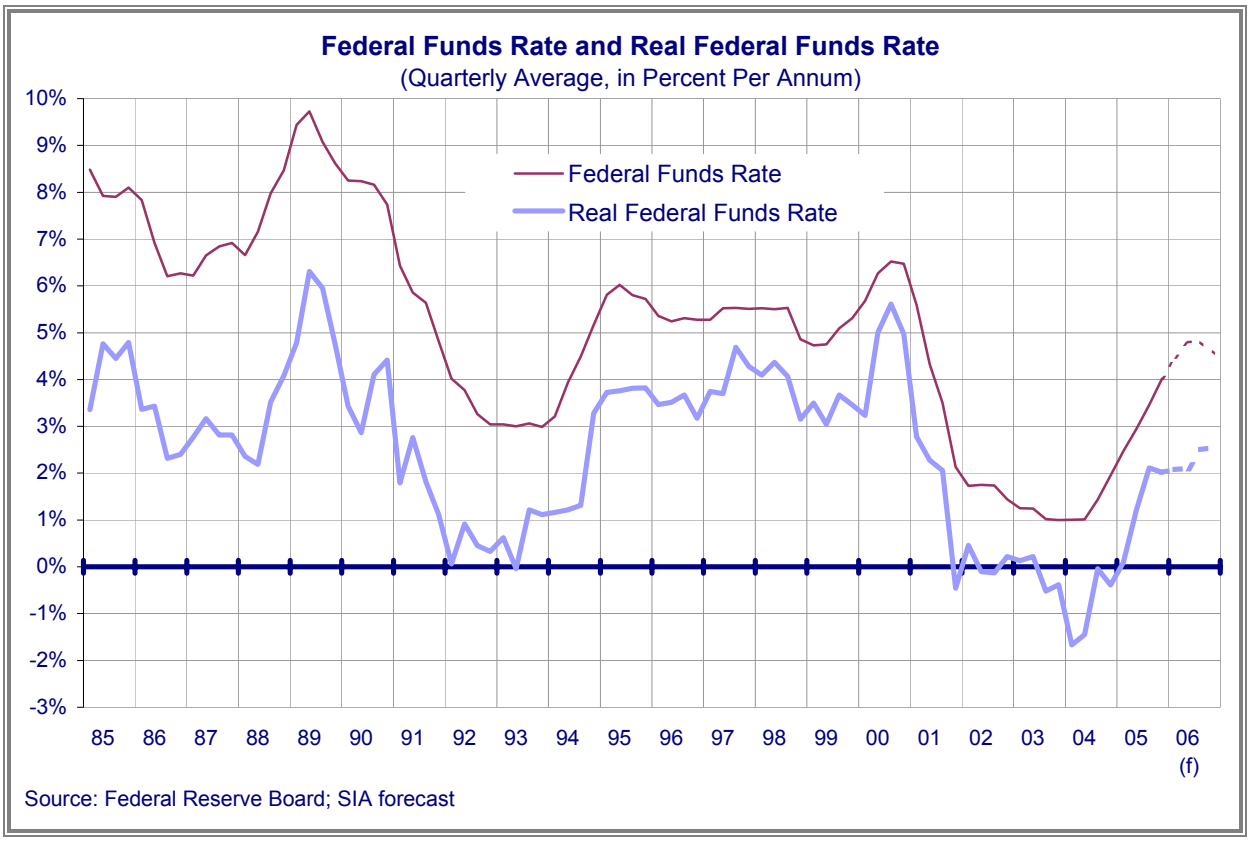


[18] Ibid.

[19] Taylor Rules are named after John Taylor, formerly Undersecretary of the Treasury who, twelve years ago as a Stanford University professor, claimed that adhering to a simple rule or strategy whereby the central bank sets the Federal Funds rate in response to two variables – the deviation of inflation from a target rate and the deviation of actual output in the economy from potential output, sometimes called the output gap – is a useful way to conduct monetary policy. See John B. Taylor, "Discretion Versus Policy Rules in Practice," Carnegie-Rochester Conference Series on Public Policy 39, 1993, pp. 195-214.

A cursory examination would lead one to believe that the Fed has fallen "behind the curve" and perhaps should have initiated this round of monetary tightening sooner, having erred on the side of caution.[20] Higher recent and expected rates of inflation have also raised the level of a "neutral" Fed Funds rate to a range of 4.0% – 4.5%, and increased support for the argument that the Fed needs to go beyond this level in order to anchor expectations.

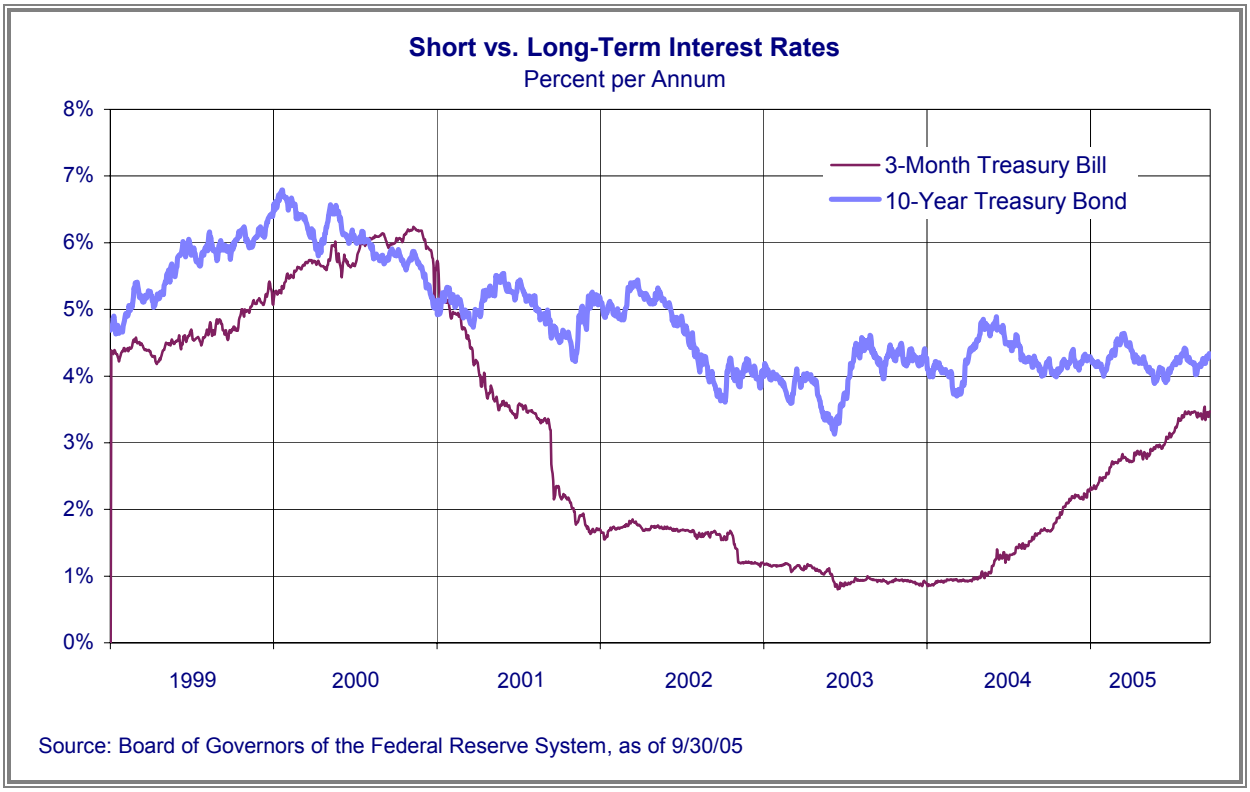
Accordingly, the Fed is expected to continue its "measured withdrawal of monetary accommodation" into next year. Put more simply, the Fed will likely extend its pattern of raising the key Fed Funds by 25 basis points (a quarter of a percentage point) at each of the next three FOMC meetings from 4.00% currently, where it stands after twelve consecutive quarter point increases beginning in June 2004. This rate is expected to rise to 4.25% on December 13, 4.5% on January 31, 2006, and 4.75% on March 28, 2006, the first FOMC meeting with Bernanke as Chairman. If, at that time, the core rate of inflation is above the "comfort zone" (1.5% – 2.0%), then a 5.0% Fed Funds target appears reasonable. More likely is that further hikes will prove unnecessary and weakness in the economy might well induce the Fed to begin cutting rates early in the second half of next year.



Less clear is what longer-term interest rates will do, since, until recently, they have been largely unresponsive to short-term rate hikes. Increasing short-term rates are normally accompanied by a rise in long-term yields, and the unresponsiveness of long-term yields was perplexing, posing a "conundrum" to Mr. Greenspan, among others, earlier this year. The yield on the 10-year U.S. Treasury bond has risen over the past two months, in tandem with a comparable rise in expected inflation and in expected short-term rates (Fed Funds Futures rates), briefly reaching seven-month highs of 4.59% in late October before settling back near the top of its

[20] For a fuller explanation of this point of view and an examination of explanations of the "conundrum" see *SIA Research Reports*, Vol. VI, No.4, April 28, 2005 (www.sia.com/research/pdf/RsrchRprtVol6-4.pdf).

recent trading range. While further increases in long-term bond yields are expected, they may not arrive quickly enough to prevent further flattening of the yield curve or, possibly, a brief "inversion" of the curve (with short-term rates higher than longer-term rates) late in 1Q'06.



The Housing Market

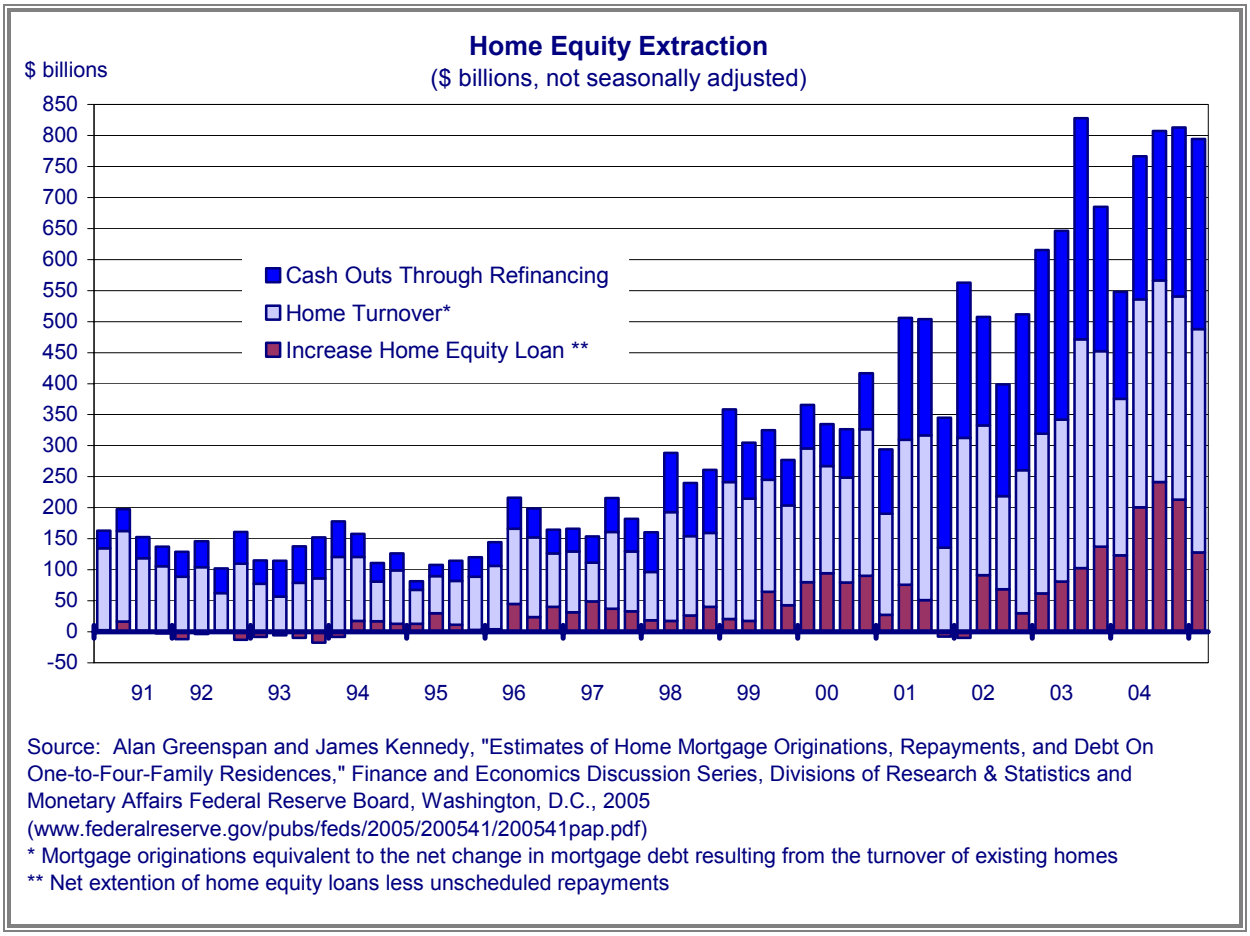
Over the past decade the value of homes has risen at a 9% annual rate, from $8 trillion at end-1995 to $18 trillion currently.[21] Home mortgage debt rose at an even faster pace, and discretionary extraction of home equity accounted for about four-fifths of the rise in home mortgage debt over this period.[22] This home equity extraction, which includes both realized and yet-to-be realized capital gains, is shown in the chart below and can be separated into three sources: (1) refinancing cash-outs; (2) home turnover — that is, mortgage originations of buyers of existing homes less the associated debt cancellation of sellers; and, (3) increases in home equity loans. "Survey data suggest that approximately a fourth to a third of the value of home equity loans and cash-outs finances personal consumption expenditures directly. Another fourth funds repayment of nonmortgage debt that had been used, in effect, as bridge financing, predominantly of personal consumption expenditures … it is difficult to dismiss the conclusion that a significant amount of consumption is driven by capital gains on some combination of both stocks and residences, with the latter being financed predominantly by home equity extraction."[23] If, as appears to be the case, the housing market is softening and home equity

[21] Mortgage Banking, Remarks by Chairman Alan Greenspan to the American Bankers Association Annual Convention, Palm Desert, California, September 26, 2005 (www.federalreserve.gov/BoardDocs/Speeches/2005/200509262/default.htm).

[22] Alan Greenspan and James Kennedy, "Estimates of Home Mortgage Originations, Repayments, and Debt On One-to-Four-Family Residences," Finance and Economics Discussion Series, Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board, Washington, D.C., 2005 (www.federalreserve.gov/pubs/feds/2005/200541/200541pap.pdf).

[23] Op. cit. 21.

extraction peaked earlier this year, it is expected to undermine growth of personal consumption expenditures spending, which accounts for 70.6% of total GDP.



Source: Alan Greenspan and James Kennedy, "Estimates of Home Mortgage Originations, Repayments, and Debt On One-to-Four-Family Residences," Finance and Economics Discussion Series, Divisions of Research & Statistics and Monetary Affairs Federal Reserve Board, Washington, D.C., 2005 (www.federalreserve.gov/pubs/feds/2005/200541/200541pap.pdf)

* Mortgage originations equivalent to the net change in mortgage debt resulting from the turnover of existing homes

** Net extention of home equity loans less unscheduled repayments

The current boom in residential housing is not thought to be a "bubble" but certainly appears "frothy" in certain higher-end markets, and it is there that signs of softening are apparent as 4Q'05 begins. Although sales of existing homes were unchanged in September, new home sales (which make up 15% of the market) weakened and prices declined relative to August. Average mortgage rates have risen 62 basis points since end-June,[24] and loan volumes have declined from what appears to be the peak in the housing boom reached this summer. Further increases in mortgage rates are expected into the New Year, and additional weakness in sales, construction and prices is anticipated.

Nationally, sales of new one-family homes rose 2.1% in September from August to an annual rate of 1.222 million, but were 0.1% below year-earlier levels. The number of new homes for sale at the end of the month rose 3.1% from August levels, but was 20.0% above the supply available at end-September 2004. This represents a supply of 4.9 months at the current pace of sales, unchanged from August, but well above the average of 3.9 months in the preceding 12-month period. The median sale price of new homes[25] sold in September 2005 was down 5.7% relative to August 2005, but still 1.9% above prices obtained in September 2004. The average sale price in September was down 0.6% relative to August 2005, but still 6.1% above the average sale price in September 2004.

[24] The national average rate for a 30-year fixed-rate mortgage rose to 6.15% per annum from 5.53% per annum since end-June.

[25] The price at which half the homes sold for more and half sold for less.

While no broad-based, precipitous declines are expected in home prices, simply the absence of further growth should substantially reduce home equity extraction. This in turn could be sufficient to trim consumer spending growth from the 3.9% pace recorded in 3Q'05 and in all of 2004, to more normal levels. Such a slowdown in consumer spending growth to more sustainable levels could shave as much as three-quarters of one percent from the current pace of overall real GDP growth. It is unlikely that the rest of the U.S. economy would be sufficiently robust to offset this drag, and, if so, overall real growth would decline to 2.8%, less than this year, but still above the long-run mean of 2.6%.

Frank A. Fernandez
Senior Vice President, Chief Economist and Director, Research

Real GDP: Percent Change from Preceding Period

at seasonally adjusted annual rates (s.a.a.r.)

	2002	2003	2004	2005	2006	2004 1Q	2004 2Q	2004 3Q	2004 4Q	2005 1Q	2005 2Q	2005 3Q	2005 4Q	2006 1Q	2006 2Q	2006 3Q	2006 4Q
GDP	1.6	2.7	4.2	**3.6**	**2.8**	4.3	3.5	4.0	3.3	3.8	3.3	3.8	**3.0**	**2.5**	**2.2**	**2.8**	**3.2**
Personal Consumption Expenditures (PCE)	2.7	2.9	3.9	**3.6**	**2.4**	4.7	1.9	4.4	4.3	3.5	3.4	3.9	**2.5**	**1.7**	**2.1**	**2.6**	**2.5**
—Durables	7.1	6.6	6.0	**5.9**	**3.0**	4.4	0.4	10.8	5.5	2.6	7.9	10.8	**1.0**	**1.5**	**1.7**	**2.8**	**1.7**
—Nondurables	2.5	3.2	4.7	**4.2**	**2.2**	6.6	2.6	3.9	5.5	5.3	3.6	2.6	**2.6**	**1.4**	**2.0**	**2.5**	**2.7**
—Services	1.9	2.0	3.0	**2.9**	**2.4**	3.8	1.8	3.4	3.6	2.8	2.3	3.2	**2.8**	**1.8**	**2.3**	**2.8**	**2.7**
Business Investment	-9.2	1.3	9.4	**8.4**	**6.5**	7.9	13.5	11.8	10.4	5.7	8.8	6.2	**5.3**	**7.4**	**6.4**	**6.3**	**5.9**
—Structures	-17.1	-4.2	2.2	**1.5**	**2.3**	-3.5	8.8	1.4	4.7	-2.0	2.7	-1.4	**2.0**	**1.5**	**3.5**	**5.0**	**5.0**
—Equipment and Software	-6.2	3.2	11.9	**10.7**	**7.4**	12.0	15.2	15.5	12.4	8.3	10.9	8.9	**6.0**	**8.0**	**7.0**	**6.5**	**6.0**
Housing	4.8	8.4	10.3	**6.8**	**0.6**	5.2	17.8	2.6	1.6	9.5	10.8	4.8	**2.5**	**0.0**	**-5.0**	**-1.0**	**0.0**
Exports	-2.3	1.8	8.4	**6.5**	**4.5**	5.0	6.9	5.5	7.1	7.5	10.7	0.8	**2.0**	**5.0**	**6.0**	**5.0**	**7.0**
Imports	3.4	4.6	10.7	**5.6**	**3.9**	12.0	14.5	4.7	11.3	7.4	-0.3	0.0	**4.6**	**5.4**	**5.0**	**4.5**	**4.0**
Government	4.4	2.8	2.2	**2.1**	**3.8**	3.3	2.3	1.8	0.9	1.9	2.5	3.2	**4.1**	**5.7**	**2.5**	**2.8**	**3.2**
—Federal	7.0	6.9	5.2	**3.0**	**6.4**	10.7	3.2	3.6	-0.6	2.4	2.4	7.7	**7.0**	**12.0**	**2.5**	**3.2**	**3.6**
—State and Local	3.1	0.6	0.4	**1.6**	**2.2**	-0.7	1.8	0.8	1.8	1.6	2.6	0.7	**2.5**	**2.0**	**2.5**	**2.5**	**3.0**
Inflation (percent change from preceding period, s.a.a.r.)																	
—GDP deflator	1.7	2.0	2.6	**2.8**	**3.3**	3.6	3.9	1.5	2.7	3.1	2.6	3.1	**3.4**	**3.6**	**3.3**	**3.1**	**2.8**
—PCE deflator	1.4	1.9	2.6	**2.9**	**3.3**	3.9	3.8	1.5	3.1	2.3	3.3	3.7	**3.8**	**3.2**	**3.0**	**3.0**	**2.8**
—PCE (excl. food & fuel) deflator	1.8	1.3	2.0	**2.0**	**2.2**	2.7	2.5	1.5	2.3	2.4	1.7	1.3	**2.0**	**2.4**	**2.7**	**2.3**	**2.0**
Other Indicators																	
Real change in Private Inventories*	12.5	15.5	52.0	**10.0**	**0.0**	41.9	65.6	50.4	50.1	58.2	-1.7	-16.6	**5.0**	**0.0**	**0.0**	**0.0**	**0.0**
Net Exports	-471.3	-521.4	-601.3	**-624.4**	**-641.7**	-563.0	-601.7	-606.5	-634.1	-645.4	-614.2	-611.8	**-626.4**	**-635.9**	**-640.8**	**-646.4**	**-643.8**

*billions of chained (2000) dollars

Source: BEA; SIA forecast

RISK MANAGEMENT UPDATE

Summary

Risk management continues to be one of the most intensively discussed topics in financial markets. Not only because the explosion of new products and risk transfer techniques have spawned an ever greater need for risk management professionals, but also because familiarity with risk management and its associated disclosures are necessary to have a meaningful understanding of modern financial institutions. Therefore the firms themselves, regulators, investors and vendors, among others, are working to come to grips with risk management in general, and ***market***, ***credit*** and ***operational***[1] risk specifically.

Risk management has long been an important topic for securities firms, and the Securities Industry Association (SIA) member firms have long worked on such topics, mainly through the Risk Management Committee. On October 7, SIA held its first Risk Management Conference[2], parts of which are summarized below. This is followed by the annual SIA review of risk disclosures in financial firms' public reporting and a brief look at upcoming risk management issues.

SIA Risk Management Conference

The SIA Risk Management Conference covered a variety of topics, including: the nature of risk; operational risk management at the corporate level; Basel II; and, the Counterpart Risk Management Policy Group II (CRMPG II). Other discussions were equally important, but this short list bears particular importance to the overall assessment of risk management and to the later sections of this article. The summaries provided below are very limited in their scope and do not purport to capture the entirety of the presentations touched on, or the conference as a whole.

The Nature of Risk

The keynote speaker addressed the overall issue of defining and coming to terms with how a firm 'gets into trouble' – that is, what is risk? While risk is clearly multifaceted, the keynote posited that reputational risk is paramount as so much else falls under this large category. Further, reputational risk is inexorably linked with the concept of corporate governance. The address went on to examine the role and composition of the board of directors, board committee structures and senior executives. A noted key element to preventative risk management is a 'culture of disclosure', in which problems and areas of concerns are discussed early and elevated to higher levels of management quickly. The board must be educated and kept in the loop, so that there is a chance to work on issues before they evolve into crisis.

The keynote also discussed the importance of following your own rules or 'walking the talk'. It is crucial that misdeeds have consequences. A firm's reputation is its most precious asset, and anyone who damages it – regardless of how much revenue they generate for the firm – must be fired. There should be no doubt as to the consequences of putting the firm's reputation at risk. Many problems are preventable if people are aware that it is OK to say "no". While you cannot

[1] Terms in ***bold blue italics*** are defined in the glossary at the end of this article.

[2] See www.sia.co/riskmanageo5/html/program.html for the SIA Risk Management Conference program and www.sia.com/riskmanage05/html/presentations.html for available presentations.

really teach ethics, a good training program can at least raise awareness with case studies and make it clear what is not acceptable.

Among the best preventative measures is an active human resources effort to hire only high quality people – valuing the quality, not only the quantity, of earnings – and making sure that any red flags in a person's history are fully examined. The reverse is also true – having a superior reputation makes hiring high quality people – and retaining them – that much easier.

Self-regulation and concerted industry action were also discussed as important elements of risk management. The keynote cited the recent work of the Counterparty Risk Management Group II[3] as an example of how self-regulation should work. The industry identified problems, formed a group of varied market participants, discussed the issues, formed working groups to delve into those problems, and issued a report. It is up to the individual firms to consider the report's principles and recommendations and decide how to apply them to their own operations. The speaker stressed that this is a better way to deal with problems and potential problems – concerted preventative risk management. He encourages firms, trade associations and government bodies to take this path because it yields better results than an adversarial process.

Basel II

Basel II is of keen interest worldwide, but of immediate interest to at least the five largest U.S. investment banks. While globally active financial institutions of all types will be subject to Basel II between 2007 and 2010, depending on their home country, by a twist of regulatory fate the five U.S. investment banks will be using Basel II by the end of 2005. This is due to the European Union (EU) requirement that all financial institutions operating in the EU be subject to consolidated regulatory supervision by fiscal year 2005. Since the investment banks have previously only been subject to regulation in their regulated subsidiaries (such as their U.S. broker-dealers), they needed a consolidated supervisor in a hurry. The U.S. Securities and Exchange Commission (SEC) devised a new rule set known as CSE[4] under which the SEC will supervise CSE registrants on a consolidated basis and minimum capital requirements will be calculated as under Basel II. Early implementation is challenging for both the firms and the SEC, but they are working together with the Basel Committee and the International Organization of Securities Commissions (IOSCO)[5] on implementation issues as they arise.

Although the U.S. investment banks will be essentially implementing Basel II capital calculations this year, globally active U.S. banks will be implementing Basel II beginning in 2008, when they will be required to run Basel II in parallel with current Basel I calculations. The following three years, they will use Basel II, but with a floor of 95%, 90% and 85% of Basel I capital levels, in 2009, 2010 and 2011, respectively. The capital floors will be removed in 2012. This is two years behind the Basel implementation schedule.[6] The U.S. Federal Reserve has

[3] See www.crmpolicygroup.org.

[4] See *Alternative Net Capital Requirements for Broker-Dealers That Are Part of Consolidated Supervised Entities*, 17 CFR Parts 200 and 240 [Release No. 34-49830; File No. S7-21-03], U.S. Securities and Exchange Commission, June 8, 2004 (www.sec.gov/rules/final/34-49830.htm).

[5] See www.iosco.org.

[6] The Basel II implementation schedule is: Parallel running for banks adopting the foundation internal ratings-based (IRB) approach to credit risk will apply for one year during 2006; banks moving directly from the existing framework to the advanced approaches to credit and operational risk will have two years of parallel running/impact studies during 2006 and 2007; the floors on both foundation and advanced approaches in 2008 and 2009 would be 90% and 80%, respectively; and foundation IRB banks will apply a floor of 95% in 2007 (www.bis.org/press/p040511.htm).

described this postponement as necessary to give it time to fully consider all aspects of the rule change in light of the somewhat surprising and dramatic lowering of Basel II-calculated required capital revealed in its latest quantitative impact study (QIS4).[7] Firms commented that the impact of Basel II is complicated by the U.S. delay because: the U.S. is now out of step with the rest of the world; the cost of the project has increased; and getting rid of the acknowledgedly weak Basel I regime is now contemplated two years later than originally planned.

The firms represented by the panelists supported the basic premise of Basel II, which requires risk-weighted capital calculation. Building the systems – especially for investment banks because they were not subject to the Basel I standards – has been quite challenging. The cooperative efforts of the firms, trade associations and leading global regulators have been especially encouraging. All the panelists supported the Basel II work that has led to great developments, including: being more responsive to risk; setting high standards; encouraging investment in information technology; and, enhancing disclosure.

Counterparty Risk Management Policy Group II

One of the most interesting developments in risk management in 2005 has been the work of the Counterparty Risk Management Policy Group II.[8] The CRMPG was formed in 1999 to work on improving counterparty risk management within the securities industry, spurred to action by the Long-Term Capital Management failure following the Russian default and Asian economic meltdown in 1998. CRMPG I issued a report that made significant improvements in how financial institutions dealt with counterparty risks.

While no market events had recently occurred, the group was reformed in 2005 to work on practices designed to prevent future disturbances in financial markets from turning into systemic shocks. A lot had changed since 1999, and the group was expanded to include important new market players such as hedge funds, endowments, pension funds and insurance companies, in addition to the original commercial and investment banks. The group recognized the changes in the market – credit derivatives, structured products, the growth of hedge funds, among others, assessed the progress made since the 1999 recommendations, and made new, expanded and more specific recommendations.

The main theme of the report is risk mitigation. Initially focused on credit risk, market risk, and liquidity risk, the group expanded its reach based on "the conviction that mitigating operational and reputational risk is central to the public confidence in the financial system and thus inexorably linked to the goal of financial stability."[9] The report names seven related risk mitigation themes: (1) corporate governance; (2) risk management and monitoring; (3) financial infrastructure and operational integrity; (4) understanding and managing complex financial instruments; (5) reputational risk; (6) transparency; and, (7) hedge funds. The report makes recommendations, which include specific and well-defined initiatives, as well as proposing guiding principles, which are more directional in nature and less specific in content. The recommendations and guiding principles are further broken down into categories: Category 1 are measures that individual institutions can and should take at their own initiative; Category 2 are actions that can be taken only by institutions collectively in collaboration with industry

[7] See www.federalreserve.gov/boarddocs/press/bcreg/2005/20050930/default.htm.

[8] See "Toward Greater Financial Stability: A Private Sector Perspective," presentation by Michael Alix, Senior Managing Director, The Bear Stearns Companies Inc., at the SIA Risk Management Conference, October 7, 2005 (www.sia.com/riskmanage05/pdf/Michael.Alix.pdf).

[9] Ibid, p. 6.

trade groups; and, Category 3 are measures that require action by the official sector. The recommendations and guiding principles are written so institutions can review their own progress against these standards.

Already there has been positive feedback from the official sector. Recently the Federal Reserve met with major credit derivatives dealers to discuss practices consistent with CRMPG II recommendations. Finally, firms were urged to conduct their own ***gap analyses*** against the recommendations and guiding principles and encouraged to implement improvements where necessary. It is expected that both external auditors and regulators will review firms' implementation of the key elements of the report.

Risk Disclosure Survey

The subject of enhanced risk disclosure continues to be a major topic. Risk disclosure is not only a subject for the SEC in regard to U.S. public firms' reporting, but plays a major role in the international arena as part of the third pillar of the new Basel Accord on capital measurement and capital standards (Basel II)[10]. While Basel II is yet to be implemented, the principle that capital adequacy measurements should be consistent with management's approach to risk management is firmly enshrined. Public disclosures, too, must be consistent with risk management practices if they are to deliver meaningful information to users of public reports.

The SIA has been reporting on financial institutions' risk disclosures in public reporting since 2000. Since 2001, SIA has examined risk disclosures in annual reports of major financial institutions based on the six recommendations for enhanced disclosure contained in the report of the Working Group on Public Disclosure, known as the "Shipley Report" after the name of its chairman, former Citibank chairman Walter V. Shipley (See Box 1).

Box 1: Shipley Report: Summary of Recommendations for Enhanced Disclosures[11]

1. Aggregate high, average and low trading ***Value-at-Risk*** (***VaR***)
2. High, average and low trading VaR by major risk categories, including ***diversification effects***
3. Quantification of how well market risk models performed (*e.g.*, histogram of daily trading revenues compared to average VaR)
4. Current credit exposures by internal ratings with explanatory information on their ratings
5. Information about the maturity profiles of transactions giving rise to material current credit exposures
6. Insight into credit concentrations (*e.g.*, industry sector and country risk)

[10] The three "pillars" of the new Basel Accord are: (1) minimum capital standards; (2) the supervisory review process; and, (3) market discipline. See Basel Committee on Banking Supervision, "International Convergence on Capital Measurement and Capital Standards: A Revised Framework," June 2004 (www.bis.org/publ/bcbs107.pdf) ("Basel II").

[11] Shipley, Walter V., Working Group on Public Disclosure letter to the Board of Governors, Federal Reserve System, January 11, 2001 (www.federalreserve.gov/boarddocs/press/general/2001/200110111/DisclosureGroupLetter.pdf ("Shipley Report"), p. 3.

This year's survey once again reviews the risk disclosures of 19 U.S. and global financial institutions' annual reports in order to evaluate how well the firms' disclosures adhere to the principles outlined in the Shipley Report.[12] The survey has been updated substantially since last year.[13] This year's summaries are stripped down to the simplest identification of the Shipley recommendations to be better able to quantify, rather than merely describe, adherence to the principles. The six disclosures are broken into two sections, the three that pertain to market risk disclosures in Appendix 1 (recommendations 1 – 3) and those that pertain to credit risk disclosures in Appendix 2 (recommendations 4 – 6).

Market Risk Disclosures

Most of the risk disclosures surveyed included aggregate average, high, and low, as well as year-end trading VaR for two years. Only one firm did not provide average, high and low VaR, while three did not provide year-end VaR. A majority of firms displayed one-day 99% confidence level VaR. However, four of the five investment banks displayed VaR at a 95% confidence interval, while the fifth displayed VaR at both 95% and 99% confidence intervals. Only two non-U.S. institutions used 10-day, as opposed to 1-day, VaR and one other used 10-day VaR scaled to a 1-day holding period. Four firms also displayed non-trading VaR in their risk disclosures. These results show that there is overall adherence to the first Shipley recommendation in the annual reports surveyed.

Average, high and low VaR were also disclosed by risk categories in nearly all the reports surveyed (16 out of 19 institutions). Among the institutions that disclosed VaR by major risk categories, all break it out at least into interest rate and equity components, and a large majority also included currency/foreign exchange, commodity and diversification effect components. Two firms also included a separate credit component, while one each included volatility, real estate/mortgage, and specific risk components. A few disclosures also included a graphic display of the percentage breakdown average daily VaR. Again, almost all of the surveyed reports included the Shipley recommended disclosure of VaR by major risk categories. The only unexpected result is that one of the members of the original Shipley Working Group did not disclose market risk component VaR. However, the Shipley Report makes clear that "meaningful differences are likely in how firms will implement these recommendations… reflecting legitimate differences in their internal practices. We expect firms will include these disclosures as soon as it is practical for them to do so."[14]

Firms also included disclosures that quantify the performance of their market risk models. Most of the firms provided a distribution of daily trading revenues and a disclosure of average daily VaR, as recommended in the Shipley Report. A majority of firms also provided other types of quantification of model performance such as if there were daily trading losses; how often daily trading losses exceed the amount predicted by VaR; or a graph of daily trading VaR. Less than a third of the reports surveyed contain graphs of VaR ***back testing*** results. A few others disclosed that daily losses never exceeded a stated amount or the number of days on which losses exceeded a stated amount.

[12] The makeup of the list has changed since 2001 due to mergers and acquisitions. Please see Appendix 3 for a list of the annual reports surveyed in 2004, including reference to those who were among the eleven members of the Shipley Working Group.

[13] See Brandon, Kyle L., "Risk Disclosure in Public Reporting," *SIA Research Reports*, Vol. V, No. 8 (August 2, 2004), p. 13. The summary survey results are contained in Appendices 1 and 2, on pages 19 – 21 and 22 – 31, respectively (www.sia.com/research/pdf/RsrchRprtVol5-8.pdf).

[14] Shipley Report, p. 3.

The disclosure of VaR has become the poster child of good risk disclosure, and with good risk management in general. While VaR is a very useful measurement of the day-to-day ordinary market risk, it does not reveal all market risks that a firm may be exposed to by itself. Especially lacking is a reflection of extreme risks, the so-called ***fat tail*** of the distribution of risks. These are risks of extreme events that are rarely realized, so because of their infrequency they do not fall into the 99% confidence interval. Nor are data from extreme events always included in the data sets used to calculate VaR. If the last market 'meltdown' occurred long enough ago, it would not be included in the data set used to calculate VaR.

Stress testing and/or ***scenario analysis*** are used to complement VaR as a risk management technique to try to capture more severe market moves than are captured in VaR analysis. Firms are also, in some cases, disclosing some results of stress testing. While all of the reports surveyed at least mention stress testing and/or scenario analysis as risk management techniques used to supplement VaR, only a few disclose actual results or ranges of results of stress testing. To give an idea of the range of differences in disclosure of stress test results, word searches for the terms stress test and scenario analysis were performed in the 19 annual reports, with the results shown below. Clearly the area of stress test disclosure is in a very early stage of development. While there appears to be considerable support for its increased use by firms as part of their risk management practice[15], there is as yet little agreement as to how stress testing disclosure could be used to enhance the usefulness of public risk disclosure. However, with implementation of Basel II only a few years away, and increasing attention on stress testing by other bodies such as the UK's Financial Service Authority, such disclosures may become more widely used.

Word Search Results

	High	Low	Mean	Median
Stress Test	36	1	9	5
Scenario Analysis	16	0	1	0

Credit Risk Disclosures

Credit risk disclosures are not nearly as uniformly in line with the recommendation of the Shipley Report as the market risk disclosures. It is here that differences between investment banks and commercial banks are quite clear. Although some U.S. investment banks have considerable credit exposure, the relative importance of those exposures is quite different and therefore the disclosures are also different. There are also differences to be found between U.S. banks that are internationally active and those that are not.

The disclosure of credit exposure by internal ratings varied widely among the 19 firms. While most of the reports – 15 out of 19 – include some disclosures by internal ratings, they are very different. In the case of different types of firms, this no doubt reflects their very different credit portfolios. There is no way of knowing, however, in the case of those reports not accompanied by internal ratings disclosures whether they are being developed for the future, or have been deemed unnecessary by management. Seven of the 19 firms disclose OTC derivative exposure by internal ratings in the Management Discussion and Analysis (MD&A) section of their annual reports, while five more have some disclosure of derivatives exposures by internal rating in the

[15] For a look at an ongoing stress testing debate, see http://belranto.typepad.com/bel_ranto/stress_testing/index.html.

notes to their financial statements (Notes). Several of the reports contain some disclosure of credit exposure by internal ratings in the areas of lending commitments, corporate credit exposure, or other trading products.

Disclosure practices are also mixed in the area of maturity profiles of transactions giving rise to material current credit exposures. No doubt this is due in large part to different firms having different material exposures. Many of the reports contain maturity profiles of OTC derivatives: six reports contain charts of such exposure analysis in their MD&As, while eight firms include maturity profiling of some derivative exposures. Contractual obligations and commitments appear often in the MD&As, 12 and seven times, respectively. Maturity analyses of other types of exposures include guarantees, loans, lending commitments and off-balance sheet arrangements.

Credit concentrations are another area with mixed disclosure practices. Stripping out the U.S. investment banks, however, yields a more uniform picture with a large majority, 11 out of 14, disclosing credit concentrations by industry sector and geographic location, as well as 10 out of 14 disclosing cross-border exposures. A significant number, six out of 14, also disclosed credit concentrations to emerging markets. U.S. investment banks' largest credit exposures appear to be to U.S. government, federal agency obligations or other sovereigns, as disclosed in the MD&A or Notes to financial statements of four out of the five U.S. investment banks. Other credit concentrations disclosed among the 19 reports included loans by industry sector and geographic region, and structural currency exposures.

Upcoming Topics in Risk Management

Operational Risk

Operational risk is a relatively new, but rapidly developing area of risk management. In addition to capital requirements for market and credit risk, Basel II will also require the calculation of capital requirements to reflect operational risk. While financial firms already have or are developing models that deal with capital calculations for market and credit risk under Basel II, operational risk capital calculations must begin from scratch.

Basel II describes three approaches to the calculation of operational risk capital requirements, which are, in increasing sophistication: the basic indicator approach; the standardised approach; and, the advanced measurement approaches (AMA). Under the AMA, the use of which is subject to supervisory approval, "the regulatory capital requirement will equal the risk measure generated by the bank's internal operational risk measurement system using the quantitative and qualitative criteria."[16] As Basel II implementation nears, the firms, trade associations and regulators will work together to finalize what qualifies as an approved internal risk measurement system.

Jump-to-Default Risk

An *Ad Hoc* committee of SIA has been working with the IOSCO/Basel Joint Working Group on Basel II trading book issues. While good progress has been made, and firms are, on the whole, pleased with the final draft release in July 2005[17], there are outstanding issues to be dealt with as Basel II is implemented. Of particular concern is that rules regarding the calculation of capital

[16] Basel II, p. 140.

[17] See www.bis.org/publ/bcbs116.pdf.

required to reflect 'jump-to-default' risk do not become overly prescriptive, but rather grant flexibility. The term jump-to-default describes a situation in which a credit risk suddenly defaults, in contrast to the more common occurrences of a process of declining credit worthiness, or a 'migration-to-default', that are more typically observed in mark-to-market trading books.

In particular, the investment banks want to make sure that the rules recognize legitimate differences between their trading portfolios and other institutions' buy-and-hold- strategies. Critically, any proposed model must recognize the effects of a risk management process (*i.e.*, hedging, limits, stop-losses, diversification). Implementation will be a lengthy process, and issues such as modelling jump-to-default risk will take concerted industry efforts to ensure results consistent with internal risk management practices, congruent with other capital methodologies within Basel II and easily implemented within and across firms.

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Appendix 1
Summary of "Shipley Report" Disclosures 1 – 3: 2004 Annual Reports

Legend:
IB = Investment Bank
U.S. BHC = U.S. Bank Holding Company
Non-U.S. BHC = Non-U.S. Bank Holding Company

Firm	1. Trading VaR Disclosures		2. VaR Disclosures by Major Risk Categories		3. Quantification of Market Risk Model Performance	
1 IB	Aggregate FY-end VaR: For How many years? Aggregate High/Low/Ave: For How many years? Interval (Day/Week): Confidence Level (%):	Y 2 Y 1 D 95	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect:	Y Y Y Y Y N Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Average daily trading profit.	Y Y Y N
2* IB	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave[18]: For How Many Years? Interval (Day/Week): Confidence Level (%):	Y 2 Y 1 D 95	Component FY-end VaR: Component High/Low/Ave[18]: Interest Rate: Equity: Currency: Commodity: Diversification Effect:	Y Y Y Y Y Y Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR:	Y Y Y Y
3* IB	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%): Other: Trading and non-trading VaR; aggregate and component average one-day 99% and 95% trading VaR four-year/one-year historical time series; and, average aggregate trading VaR scaled to 10 days.	Y 2 Y 2 D 99	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect:	Y Y Y Y Y Y Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR:	N Y Y Y
4 IB	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%): Other: Above based on net revenue volatility. Also provided based on historical simulation approach.	Y 2 Y 2 D 95	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect:	Y Y Y Y Y N Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Daily trading losses did not exceed a specified amount.	N N Y N

[18] Average daily aggregate and market component VaR are provided for three years.

* Member of original Shipley Group.

Firm	1. Trading VaR Disclosures		2. VaR Disclosures by Major Risk Categories		3. Quantification of Market Risk Model Performance	
5* IB	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave[19]: For How Many Years? Interval (Day/Week): Confidence Level (%): Other: Aggregate and component quarterly average and year-end non-trading VaR.	Y 2 Y 1 D 95	Component FY-end VaR: Component High/Low/Ave[19]: Interest Rate: Equity: Currency: Commodity: Diversification Effect: Other: Volatility. Non-trading VaR is separated into the same categories, except for commodity.	Y Y Y Y Y Y Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR:	Y N Y N
6* U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%): Other: Separate investment bank trading and credit portfolio VaR.	Y 2 Y 2 D 99	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect: Other: Credit portfolio.	Y Y Y Y Y Y Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Average daily trading profit; daily trading losses did not exceed a specified amount; and, range of results of economic value stress testing.	Y Y Y N
7* U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%):	N - Y 2 D 99	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect: Other: Credit and real estate/mortgage.	N Y Y Y Y Y Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Daily trading losses that exceeded specified amounts.	Y Y Y Y
8 U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%): Other: Doesn't specify 97.5% or 99% confidence level.	Y 2 Y 2 D ?	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect:	N Y Y Y Y Y N	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR:	Y Y Y Y
9* U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave[20]: For How Many Years? Interval (Day/Week): Confidence Level (%):	Y 2 Y 2 D 99	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect: Other: Specific risk.	Y Y Y Y Y Y N	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Number of trading-related daily losses greater than a specified amount.	Y N Y N

[19] Average daily aggregate and market component VaR are provided for two years.

[20] Aggregate high and low VaR are not provided.

* Member of original Shipley Group

Firm	1. Trading VaR Disclosures		2. VaR Disclosures by Major Risk Categories		3. Quantification of Market Risk Model Performance	
10* U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%):	N - Y 1 D 99	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect:	N N N N N N N	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR:	N N N N
11 Non-U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%):	N - N - D 99	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect:	N N N N N N N	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Graph of weekly stress test history.	N N Y Y
12 Non-U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%):	Y 2 Y 2 D 98	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect: Other: Credit spread.	N Y Y Y Y Y Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Average trading revenue and number of positive revenue days.	Y Y Y Y
13 Non-U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%):	Y 2 Y 2 D 97.5	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect:	N N N N N N N	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Market risk by business unit; graph of back-testing profit and loss; and, stress test results.	N N N Y
14* Non-U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%): Other: Also for first half 2004.	Y 2 Y 2 10 D 99	Component FY-end VaR: Component High/Low/Ave[21]: Interest Rate: Equity: Currency: Commodity: Diversification Effect:	Y Y Y Y Y N N	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Average daily revenue from risk-related treasury activities and standard deviation of revenues.	Y N Y N
15* Non-U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%):	Y 2 Y 2 D 99	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect:	Y Y Y Y Y Y Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Graph of daily trading income; daily trading loss (%); and, stress test results.	Y Y Y Y

[21] Component high and low daily VaR are not provided.

* Member of original Shipley Group

Firm	1. Trading VaR Disclosures		2. VaR Disclosures by Major Risk Categories		3. Quantification of Market Risk Model Performance	
16 Non-U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%): Other: 10-day VaR scaled to 1-day holding period and non-trading VaR. Also, non-trading market risk VaR.	Y 2 Y 2 D 99	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect: Other: Non-trading market risk VaR by major risk categories.	Y Y Y Y Y Y Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Graph of daily back-testing profit and loss.	Y Y Y Y
17 Non-U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%):	Y 3 Y 3 D 99	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect: Other: Combined currency and commodity, and debt specific component. Graph of global VaR by major risk categories.	Y Y Y Y N N N	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Graph of daily net trading revenue.	Y Y Y Y
18* Non-U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%): Other: 10-day 99% trading VaR by business group; 1-day 99% VaR for group; and, 10-day 99% non-trading currency risk VaR.	Y 2 Y 2 10 D 99	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect: Other: "Other" component. Pie chart of average VaR, by product type (%).	Y Y Y Y Y N Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Graph of investment bank daily back-testing revenue.	N Y Y Y
19 Non-U.S. BHC	Aggregate FY-end VaR: For How Many Years? Aggregate High/Low/Ave: For How Many Years? Interval (Day/Week): Confidence Level (%):	Y 2 Y 2 D 99	Component FY-end VaR: Component High/Low/Ave: Interest Rate: Equity: Currency: Commodity: Diversification Effect: Other: Breakdown of average VaR by component (%).	Y Y Y Y Y Y Y	Number of daily trading losses: Daily trading losses in excess of VaR: Distribution of daily trading revenues: Graph of daily trading VaR: Other: Graph of daily back-testing profit and loss and description of results of stress-test scenarios for various risk factors.	N Y N Y

* Member of original Shipley Group

Appendix 2
Summary of "Shipley Report" Disclosures 4 – 6: 2004 Annual Reports

Legend:
IB = Investment Bank
U.S. BHC = U.S. Bank Holding Company
Non-U.S. BHC = Non-U.S. Bank Holding Company

Firm	4. Credit Exposures by Internal Rating		5. Maturity Profile of Transactions		6. Credit Concentrations, *e.g.* Industry, Sector, Country Risk	
1 IB	OTC derivatives:	Y	OTC derivatives: Contractual obligations: Commitments: In Notes: Guarantees.	Y Y Y	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: In Notes: Description of exposure.	N N N N
2* IB	OTC derivatives:	Y	OTC derivatives: Contractual obligations: Commitments: In Notes: Guarantees and OTC derivatives.	Y Y Y	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: Other: Exposure to U.S. government, federal agency obligations, and other sovereigns and whether credit exposure to any other counterparty exceeded 5% of assets.	N N N N
3* IB	OTC derivatives: Other: Lending commitments.	Y	OTC derivatives: Contractual obligations: Commitments: Other: Lending commitments and contingent liabilities. In Notes: Guarantees, commitments and contingencies.	Y Y Y	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: In Notes: Exposure to and concentration of collateral held in U.S. government, federal agencies, and other sovereigns.	Y N N N
4 IB	OTC derivatives: In Notes: OTC contracts by actual ratings made by external rating agencies or by equivalent internal ratings, in percentage.	N	OTC derivatives: Contractual obligations: Commitments: Other: Lending commitments and guarantees. In Notes: Guarantees, commitments and OTC contracts.	N Y Y	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: In Notes: Exposure to U.S. government, federal agencies, and other sovereigns. Description of industry exposure.	N N N N
5* IB	OTC derivatives: Other: Trading and non-trading exposures and commitments with exposure to non-investment grade or highly leveraged issuers and/or counterparties.	Y	OTC derivatives: Contractual obligations: Commitments: Other: Significant off-balance sheet arrangements. In Notes: Guarantees and commitments.	Y Y N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: Other: Largest non-investment grade industry exposure. In Notes: Exposure to U.S. government, federal agency obligations, and other sovereigns. Unsecured exposure and credit rating of largest counterparty.	N N N N

* Member of original Shipley Group

Firm	4. Credit Exposures by Internal Rating		5. Maturity Profile of Transactions		6. Credit Concentrations, *e.g.* Industry, Sector, Country Risk	
6* U.S. BHC	OTC derivatives: Other: Ratings profile of wholesale exposure (including derivative receivables and lending-related commitments).	Y	OTC derivatives: Contractual obligations: Commitments: Other: Off-balance sheet lending-related financial instruments and contractual cash obligations, wholesale exposure and non-exchange traded commodity contracts.	Y N N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: Other: Discussion of significant industry and criticized industry exposures.	N Y Y N
7* U.S. BHC	OTC derivatives: Other: No internal ratings provided.	N	OTC derivatives: Contractual obligations: Commitments: Other: Lending commitments; long-term debt and other obligations; asset and liability management interest rate and foreign exchange contracts; and, non-exchange traded commodity contracts. In Notes: Debt securities portfolio.	N N N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure:	Y Y Y Y
8 U.S. BHC	OTC derivatives: Other: No internal ratings provided.	N	OTC derivatives: Contractual obligations: Commitments: In Notes: Risk management derivative financial instruments.	N Y N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure:	N Y N N
9* U.S. BHC	OTC derivatives: Other: Risk rating distribution of the corporate credit portfolio and hedged credit exposure.	Y	OTC derivatives: Contractual obligations: Commitments: Other: Corporate credit portfolio. In Notes: Guarantees and standby letters of credit.	N Y Y	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: In Notes: Two largest credit concentrations by country.	Y Y Y Y
10* U.S. BHC	OTC derivatives: Other: No internal ratings provided.	N	OTC derivatives: Contractual obligations: Commitments:	N Y N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure:	N N N N
11 Non-U.S. BHC	OTC derivatives: Other: No internal ratings provided.	N	OTC derivatives: Contractual obligations: Commitments: In Notes: Derivative financial instruments.	N Y N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: In Notes: Credit concentration by geographic area; industry and counter party exceeding certain levels.	N Y Y Y

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Firm	4. Credit Exposures by Internal Rating		5. Maturity Profile of Transactions		6. Credit Concentrations, *e.g.* Industry, Sector, Country Risk	
12 Non-U.S. BHC	OTC derivatives: Other: Chart of internal credit ratings. Loans and advances, balances and limits to wholesale customers and commodity derivatives. In Notes: Counterparty analysis of OTC and exchange traded derivatives.	N	OTC derivatives: Contractual obligations: Commitments: Other: Loans and advances to customers and banks and commodity derivatives. In Notes: Commitments; residual risk under finance leases and obligations payable; and, derivatives and other financial instruments.	N Y Y	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: Other: Loans and advances to borrowers in non-local currencies In Notes: Loans and advances to customers and provision balances for bad and doubtful debt by region and industry. Structural currency exposures.	Y Y Y Y
13 Non-U.S. BHC	OTC derivatives: Other: Chart of internal ratings. Country risk by rating group. The 20 largest sub-standard loans and 20 largest problem loans. Borrowing by rating structure and credit derivatives (trading book) reference assets.	N	OTC derivatives: Contractual obligations: Commitments: In Notes: Derivative transactions.	N N N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: In Notes: Provision for credit risk, derivatives business, and, credit risks relating to balance sheet financial instruments, all by customer groups, domestic and foreign.	N N Y Y
14* Non-U.S. BHC	OTC derivatives: Other: No internal ratings provided.	N	OTC derivatives: Contractual obligations: Commitments: Other: Loans. In Notes: Derivative transactions and loans and advances to banks and customers.	N Y N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: In Notes: Loans and advances to customers by region; contingent liabilities and commitments by region; and, net structural currency exposures.	N Y Y Y
15* Non-U.S. BHC	OTC derivatives: Other: Corporate credit exposure. In Notes: Credit concentration of lending-related commitments to investment grade equivalent counterparties.	Y	OTC derivatives: Contractual obligations: Commitments: Other: Exchange-traded derivative instruments. In Notes: Loans and advances to credit institutions and customers.	Y N N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: In Notes: Main credit exposure categories by industry and region.	Y Y Y Y
16 Non-U.S. BHC	OTC derivatives: Other: Gross exposure, risk mitigation and loss given default. In 20-F: OTC derivatives.	N	OTC derivatives: Contractual obligations: Commitments: In Notes: Guarantees and commitments. In 20-F: Loan portfolio.	N N N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: In Notes: Loan portfolio by borrower group, foreign and domestic. In 20F: Cross-border outstanding by country and type of customer. Loan portfolio by industry and region.	N N N N

* Member of original Shipley Group

Firm	4. Credit Exposures by Internal Rating		5. Maturity Profile of Transactions		6. Credit Concentrations, *e.g.* Industry, Sector, Country Risk	
17 Non-U.S. BHC	OTC derivatives: In local GAAP Notes: Derivative financial instruments.	N	OTC derivatives: Contractual obligations: Commitments: In local GAAP Notes: Derivative financial instruments. In U.S. GAAP Notes: Financial instruments with credit risk.	N Y Y	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: In U.S. GAAP Notes: Concentrations of credit risk by region.	N Y Y Y
18* Non-U.S. BHC	OTC derivatives: Other: Chart of internal ratings. Business banking domestic gross loans; wealth management and business banking distribution of banking product exposure; and, investment bank banking and gross traded products.	N	OTC derivatives: Contractual obligations: Contingent commitments: Other: Due from banks and loans. In Notes: Derivative instruments.	N N N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure: In Notes: Due from banks and loans, by industry, foreign and domestic. Cross-border outstanding exceeding 0.75% of total assets.	Y Y Y Y
19 Non-U.S. BHC	OTC derivatives: Other: Breakdown of risk for banking customers.	N	OTC derivatives: Contractual obligations: Commitments: In Notes: Forward financial instrument commitments.	N N N	Exposure to emerging markets: Exposure by industry: Exposure by geographic location: Cross-border exposure:	Y Y Y Y

* Member of original Shipley Group

Appendix 3
List of Reports Surveyed, in Alphabetical Order

Institution	Report	Institution Type
Bank of America	*Annual Report*	*U.S. Bank Holding Company*
Bear Stearns	Annual Report	U.S. Investment Bank
Barclays	Annual Report	Non-U.S. Bank Holding Company
Citigroup	*Annual Report*	*U.S. Bank Holding Company*
Commerzbank	Annual Report	Non-U.S. Bank Holding Company
Credit Suisse Group	Annual Report and 20-F	Non-U.S. Bank Holding Company
Deutsche Bank	*Annual Report*	*Non-U.S. Bank Holding Company*
Goldman Sachs	*Annual Report*	*U.S. Investment Bank*
HSBC	*Annual Report*	*Non-U.S. Bank Holding Company*
JPMorganChase	*Annual Report*	*U.S. Bank Holding Company*
Lehman Brothers	Annual Report	U.S. Investment Bank
Merrill Lynch	*Annual Report*	*U.S. Investment Bank*
Morgan Stanley	*10-K*	*U.S. Investment Bank*
RBC	Annual Report	Non-U.S. Bank Holding Company
Societe Generale	Annual Report	Non-U.S. Bank Holding Company
TD Bank Financial Group	Annual Report	Non-U.S. Bank Holding Company
UBS	*Annual Report*	*Non-U.S. Bank Holding Company*
Wachovia*	Annual Report	U.S. Bank Holding Company
Wells Fargo	*Annual Report*	*U.S. Bank Holding Company*

Shipley Group members in italics.

*Wachovia replaced BankOne, an original Shipley Group member, which was merged with JPMorganChase in 2004.

Glossary[22]

Back testing is a statistical process for validating the accuracy of a VaR model. It essentially compares actual losses to the losses predicted by the VaR model, and tells you how many times the VaR model under-predicted actual losses versus the number of times such an under-prediction is expected. For example, for a VaR model that predicts a given loss level using a one-day holding period and 99% confidence interval, one would expect to see two or three under-predictions per year. Back testing is often required by regulators to validate the accuracy of a model before it is approved for use in regulatory calculations.

Confidence level (or Confidence Interval) is a measure of the probability that there will be price movements within a given range, which can be expressed in a number of ways. Perhaps most common is the reference to a percentage: calculating a VaR number of $1 million at a 97.5% confidence interval means that there is only a 2.5% chance that losses on the portfolio in question will exceed $1 million. The confidence interval can also be expressed in terms of how often the maximum loss is expected to exceed: $1 million VaR at a 97.5% confidence interval also means (using a one-day holding period) that a loss greater than $1 million will occur, on average, approximately once every 40 trading days. Thus the choice of a confidence interval is, to a large extent, a choice about an institution's appetite for risk.

Credit risk comprises risk of loss resulting from counterparty default on loans, swaps, options, and during settlement.

Fat tails refer to a distribution having more frequent extreme price movements than would be predicted in a normal distribution.

Gap analysis is an analysis of the gap between requirements that are met and not met, or a deficiency assessment. For example, in the case of this article, it would be an analysis of how a firm's policies and procedures meet with the recommendations and guiding principles of CRMPG II.

Holding period is an important quantitative parameter of a VaR model, and its choice requires careful deliberation. The holding period chosen will need to reflect the uses of the VaR model in question and the liquidity profile of the institution's trading activity. A ten-day holding period means that the model operates on the assumption that it would take a minimum of ten days before the institution can trade out of or hedge a position, during which time losses could accumulate. Also, different holding periods can reflect the uses of the model: a trader may be interested in normal trading market conditions and therefore a one-day holding period, while a risk manager who is more concerned by the prospect of illiquid markets may use a longer holding period.

Market risk is the risk that prices or rates will adversely change due to economic forces. Such risks include adverse effects of movements in equity and interest markets, currency exchange rates, and commodity prices. Market risk can also include the risks associated with the cost of borrowing securities, dividend risk and correlation risk.

Monte Carlo is a simulation technique that uses assumptions about the distribution of changes in market prices and rates to produce successive sets of possible future realizations of changes in those prices and rates. These sets of possible changes are used to calculate a more robust VaR estimate than is possible with limited historical data.

Operational risk encompasses the risk of loss due to the breakdown of controls within the firm including, but not limited to, unidentified limit excesses, unauthorized trading, fraud or system failure in trading or back office functions, inexperienced personnel, and unstable and easily accessed computer systems.

Scenario analysis is a risk exposure tool, by which potential loss as a result of a given event is measured. For example: what would happen to the value of the portfolio for a given economic event such as the 1987 stock market crash? Scenario analysis typically goes beyond the impact of discrete changes in market parameters on a portfolio of investments. It attempts to examine how the event would impact revenue streams and help the institution evaluate its more strategic vulnerabilities.

Stress testing is a risk exposure tool, by which potential losses as a result of changes in major market parameters are measured. For example: what would happen to the value of the portfolio for a given change in interest rates, foreign exchange rates or equity prices? Stress testing may involve relatively few changes or it may take a matrix approach in which multiple parameters are changed to see how they impact the portfolio. Choosing what to stress (i.e., the variables), the range of stress and the usefulness of the stress information (versus simply producing data overload) is only the beginning of the difficult decisions required for meaningful stress test results.

Value-at-Risk (***VaR***) is the maximum loss over a target horizon such that there is a low, pre-specified probability that the actual loss will be larger than the maximum estimated. In order to calculate VaR, historical returns (of a pre-specified holding period) are compiled and plotted into a distribution. Simply put, from this distribution, if it is normal, one can calculate the probability of returns being greater or less than a certain amount. Since distributions of returns are unlikely to be either normal or linear, more sophisticated computation methods (***Monte Carlo*** simulations being very common) are used to account for risk and correlations.

[22] Definitions were sourced from a variety of resources, such as financial firms' annual reports, *The Practice of Risk Management* (Euromoney Publications, 1998), www.gloriamundi.org, and www.gsm.uci.edu/~jorion/index.htm.

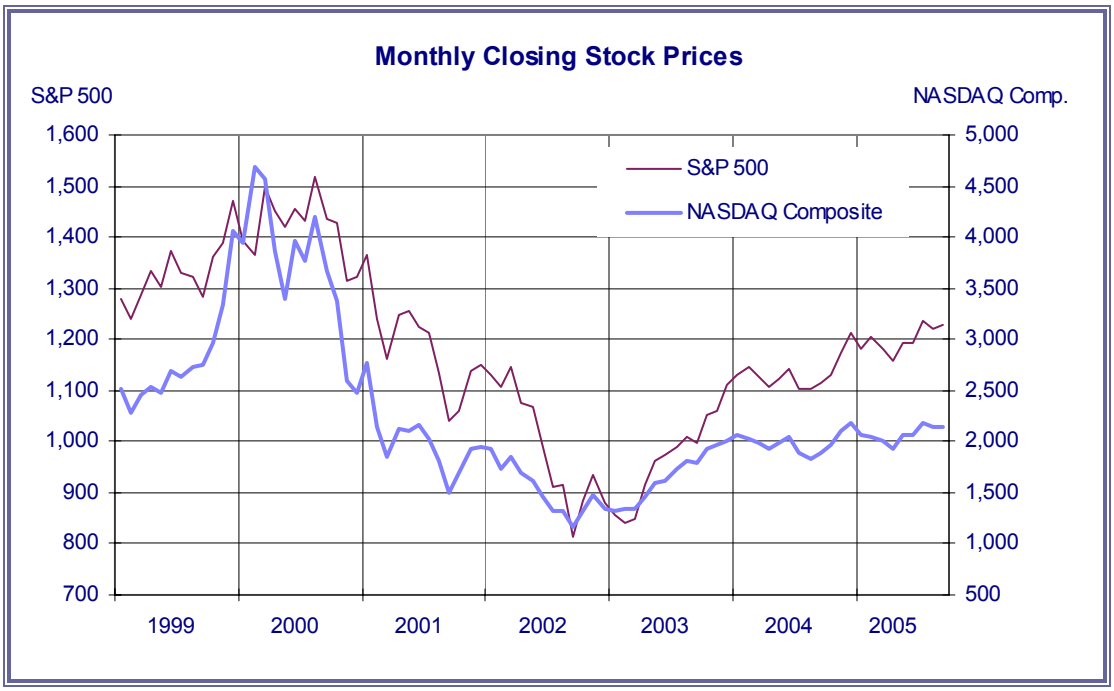
MONTHLY STATISTICAL REVIEW

U.S. Equity Market Activity

Stock Prices – In September, most benchmark indices managed to stay afloat as investors navigated choppy market conditions in the wake of two major hurricanes in the Gulf. Fears that persistently higher energy costs would slow economic growth gave way to hopes that the Fed would halt further rate hikes in the aftermath of Hurricane Katrina. Those hopes were subsequently dashed as the Fed raised short-term interest rates by another 25 basis points to 3.75% on September 20. Stock prices rebounded in the final week of September amid some strong third-quarter corporate earnings reports and a number of merger announcements. For the month overall, the Dow Jones Industrial Average was up 0.8%, closing at 10,568.70. That marked the first time since 1998 that the DJIA gained ground in September. The S&P 500 Index advanced 0.7% to 1,228.81, and the NASDAQ Composite Index ended the month essentially flat at 2,151.69.

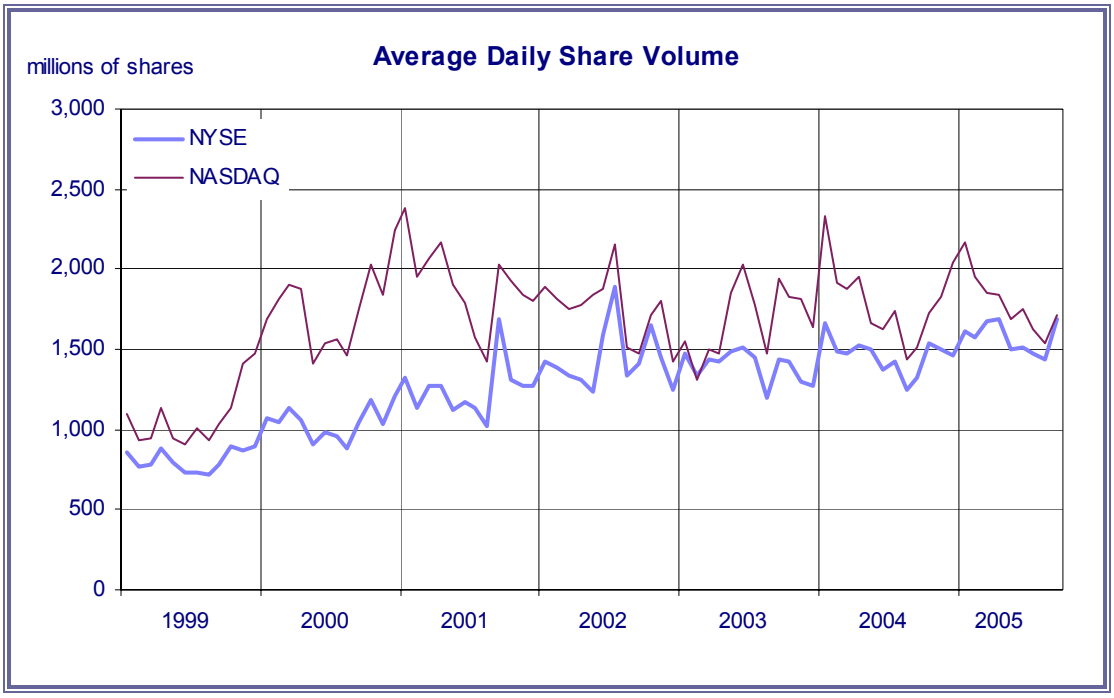
During the third quarter of 2005, all three major market gauges registering quarterly gains for the first time since 4Q'04. The NASDAQ Composite rose 4.6%, the S&P 500 increased 3.1%, and the DJIA added 2.9%, representing their largest quarterly increases in percentage terms since the end of 2004.

Even so, only the S&P 500 was able to push into positive territory for the year. Through the first nine months of 2005, the S&P 500 increased 1.4%, driven by a 40% surge in its energy stocks. Meanwhile, the DJIA fell 2.0% and the NASDAQ Composite declined 1.1%.

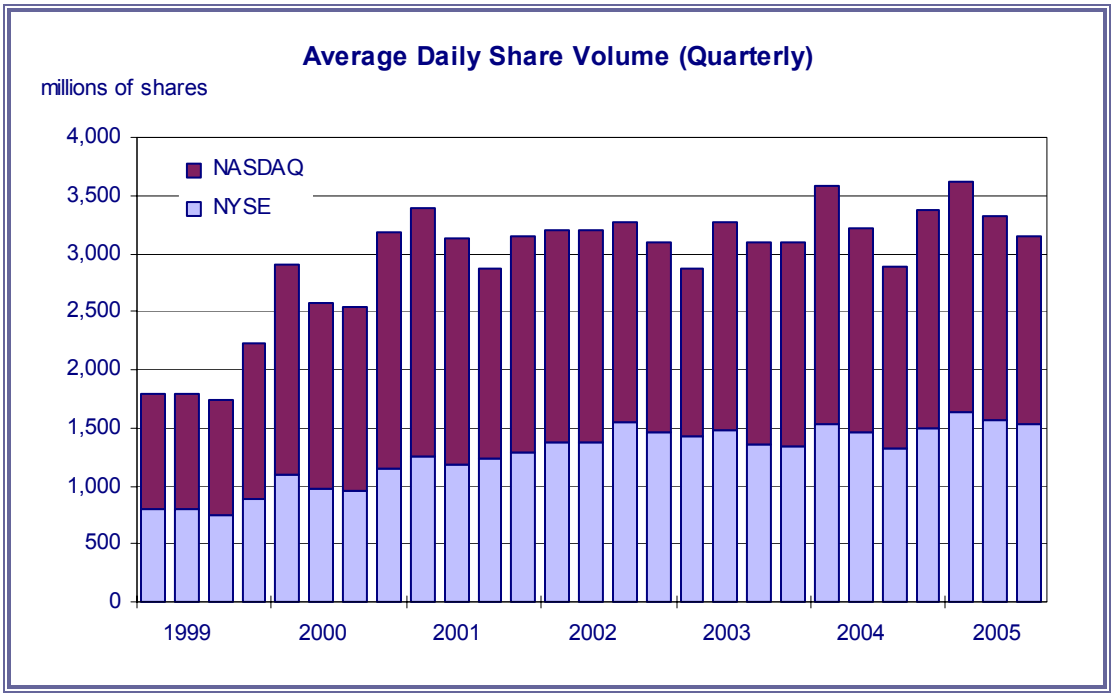


Share Volume – Volume on both the New York Stock Exchange and NASDAQ picked up markedly in September after sinking for two consecutive months to fresh 2005 lows in August. Average daily share volume on the NYSE jumped 16.8% from August's depressed level to 1.68 billion in September, making it the second most active month so far this year behind April's

volume of 1.69 billion. Despite this monthly increase, trading activity during 3Q'05 was off 2.4% from 2Q'05 levels. Still, due to a strong first quarter, NYSE average daily volume through the first nine months of 2005, at 1.58 billion, was up 9.3% from 1.44 billion in last year's comparable period.

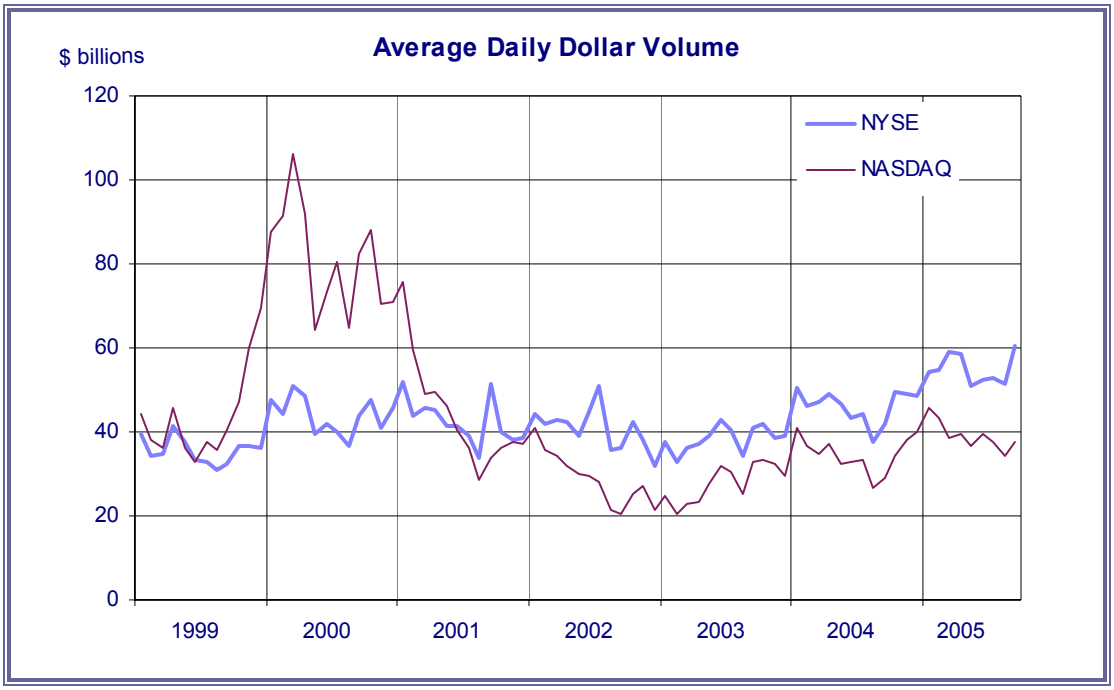


An 11.5% monthly increase in NASDAQ daily share volume to 1.72 billion in September wasn't enough to offset the declines in July and August. As a result, 3Q'05 volume was 7.6% below 2Q'05 levels. Nonetheless, the year-to-date average of nearly 1.79 billion remained 0.4% above the roughly 1.78 billion seen in the same year-earlier period.

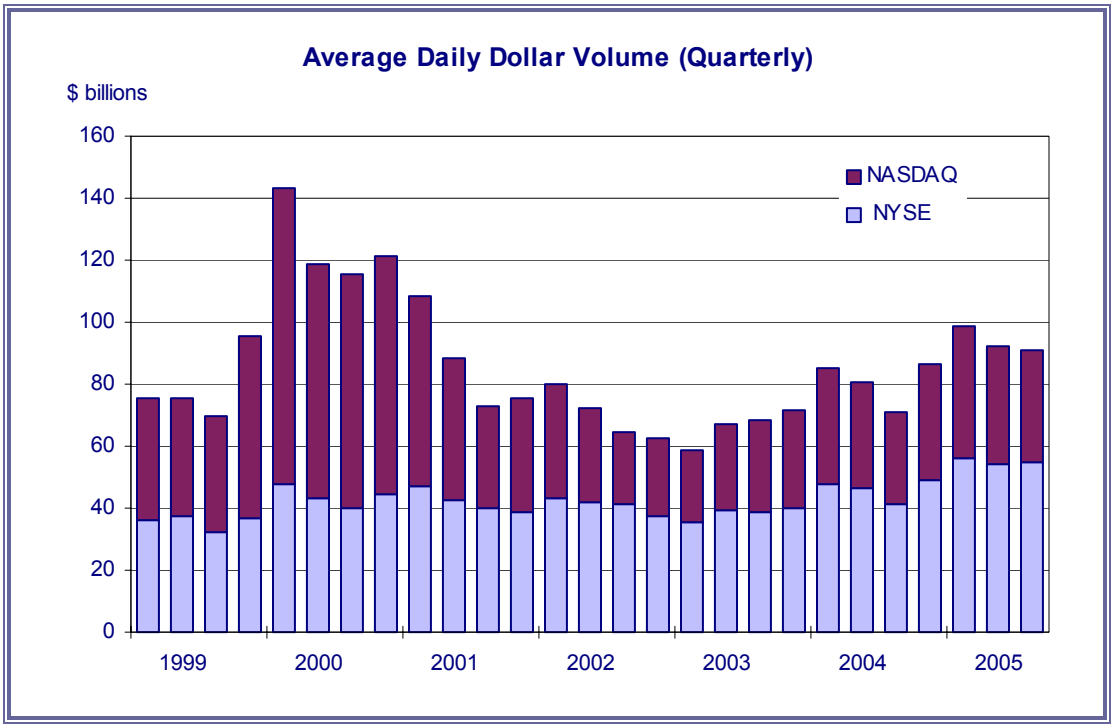


Dollar Volume – Increased trading activity led to higher dollar volumes on both the NYSE and NASDAQ in September. After hovering around $52.0 billion during the past four months, NYSE average daily dollar volume surged to $60.6 billion in September. September's result was bolstered by record daily volume on Friday, September 16th of $112.0 billion, more than double its normal level, as "quadruple-witch"[1] expirations led to heavy institutional investor activity on that day. Through the first nine months of 2005, NYSE daily dollar volume averaged $55.0 billion, up 21.8% from $45.1 billion in last year's similar nine-month period.

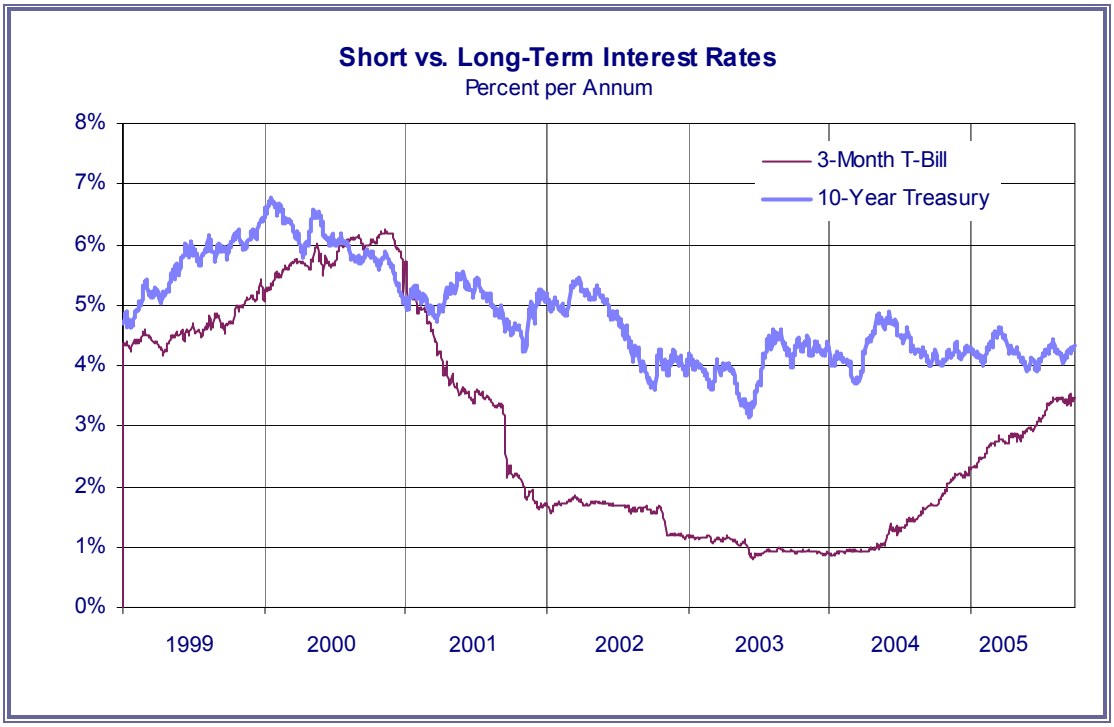
The value of daily trading in NASDAQ stocks increased 10.0% in September to $37.5 billion. Despite September's gain, dollar volume in the third quarter was weaker relative to the previous quarter. Nonetheless, year-to-date NASDAQ dollar volume of $39.1 billion remained 16.0% higher than the $33.7 billion reached a year ago.



[1] "Quadruple witch" is a term representing the simultaneous expiration of the contracts for stock index futures, index options, stock options and single stock futures taking place on the same day.

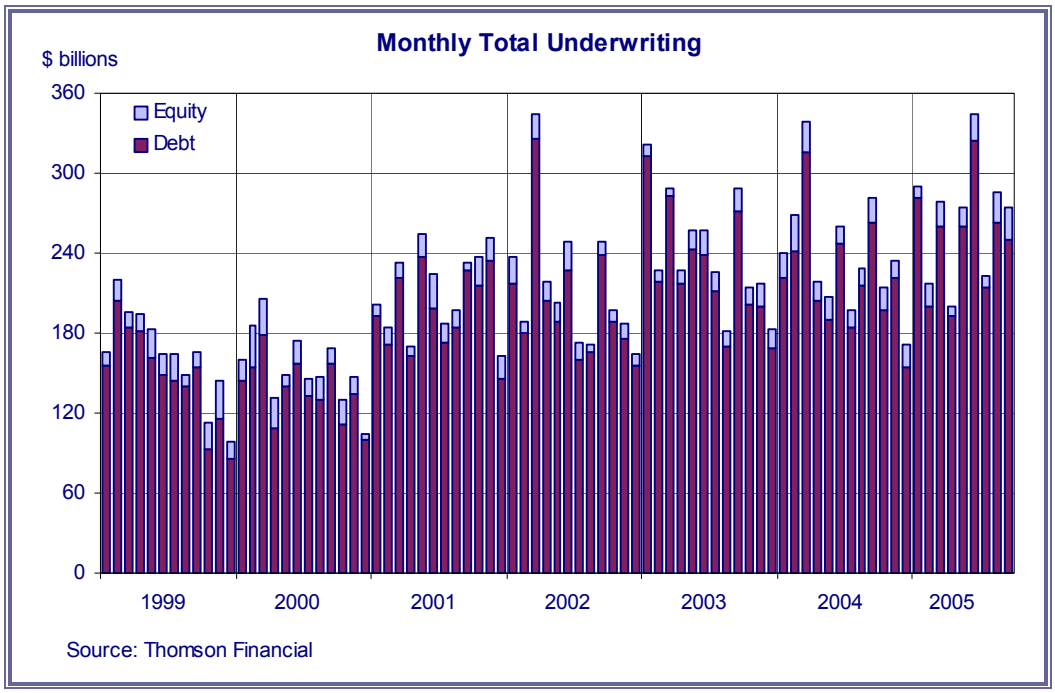


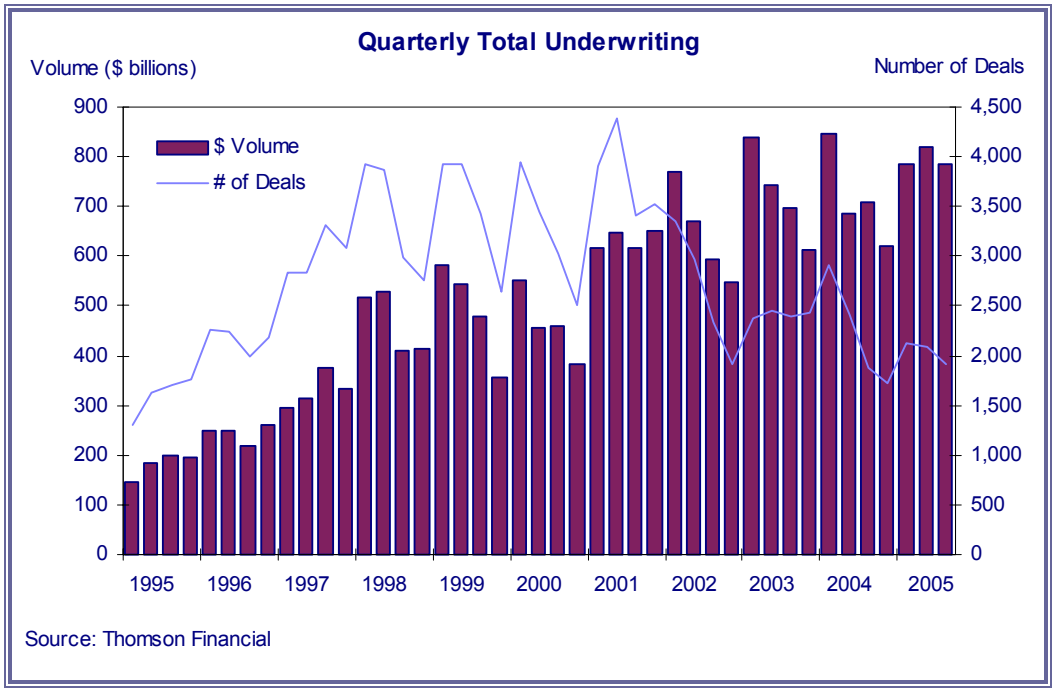
Interest Rates – Long-term Treasury bond yields rose steadily during September, reflecting growing concerns in the market about the risk of higher inflation and the fear that the Federal Reserve may raise rates too much and help invert the yield curve. By the end of 3Q'05, the 10-year Treasury yield stood at 4.34%, up from 3.94% at the end of 2Q'05. Two quarter-point increases in short-term interest rates by the Federal Reserve in August and September helped push three-month T-bill yields up to 3.47% at September's close from 3.06% in June. The yield curve between three-month and 10-year Treasuries has now flattened to 87 basis points from 246 basis points a year ago.



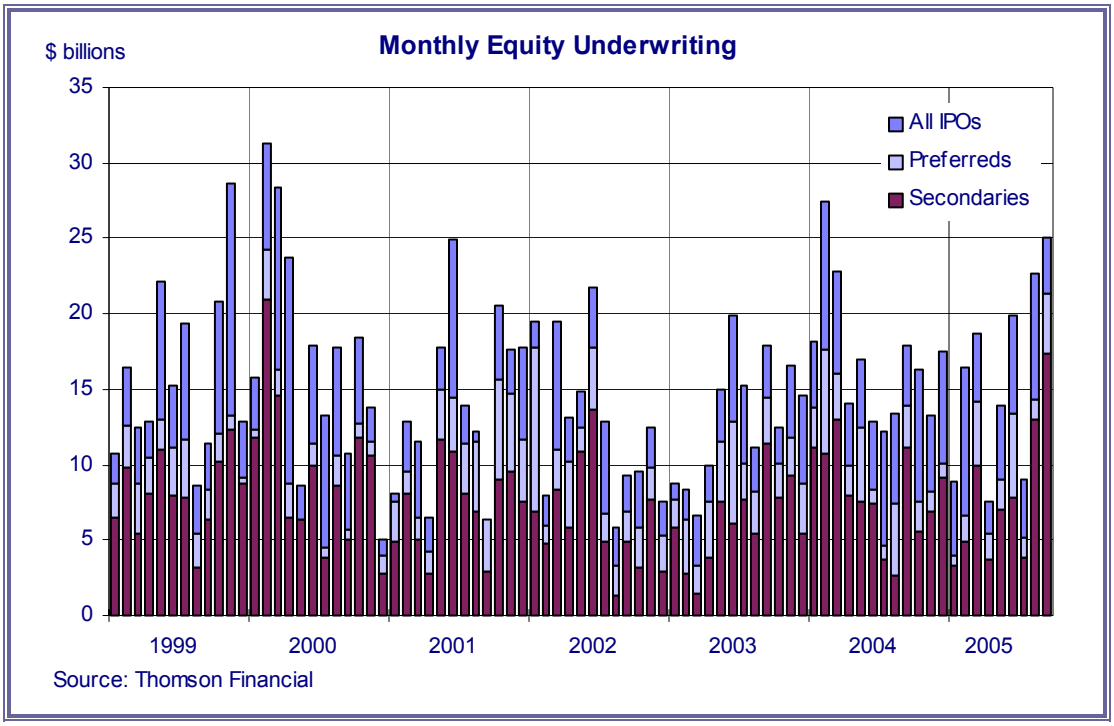
U.S. Underwriting Activity

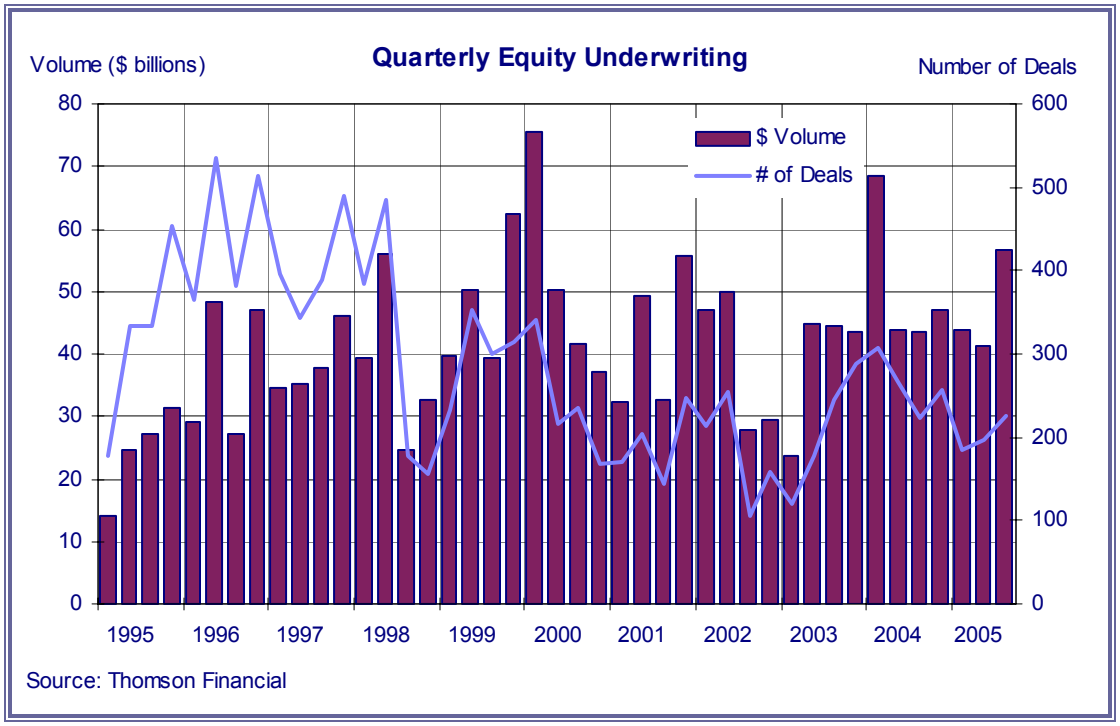
Total U.S. underwriting activity of $783.6 billion in 3Q'05 was 4.2% below 2Q'05's level of $818.2 billion, but 10.8% above 3Q'04 levels. Although the primary equity market experienced a significant rebound in the third quarter from a weaker second quarter, a modest cutback in activity in the much larger corporate debt market led to the sequential quarterly decline in the overall total. Nevertheless, new issuance of stocks and bonds is running 6.6% ahead of last year's pace year, with $2.39 trillion raised in the first nine months of 2005 compared with $2.24 trillion in 2004's comparable period.



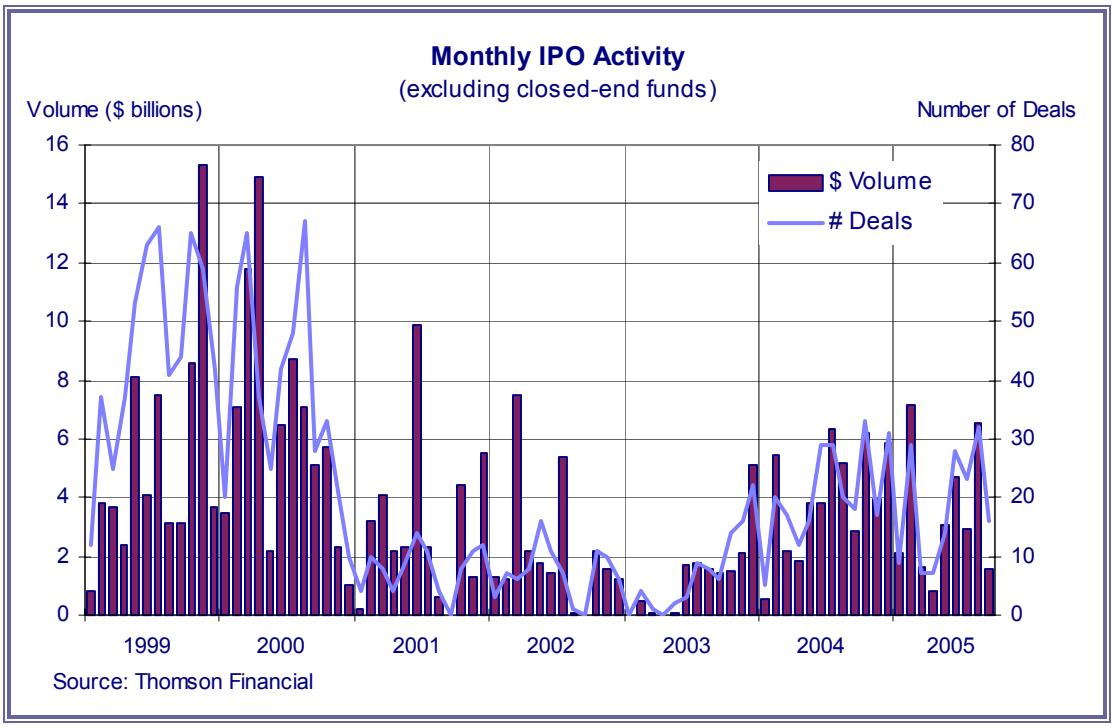


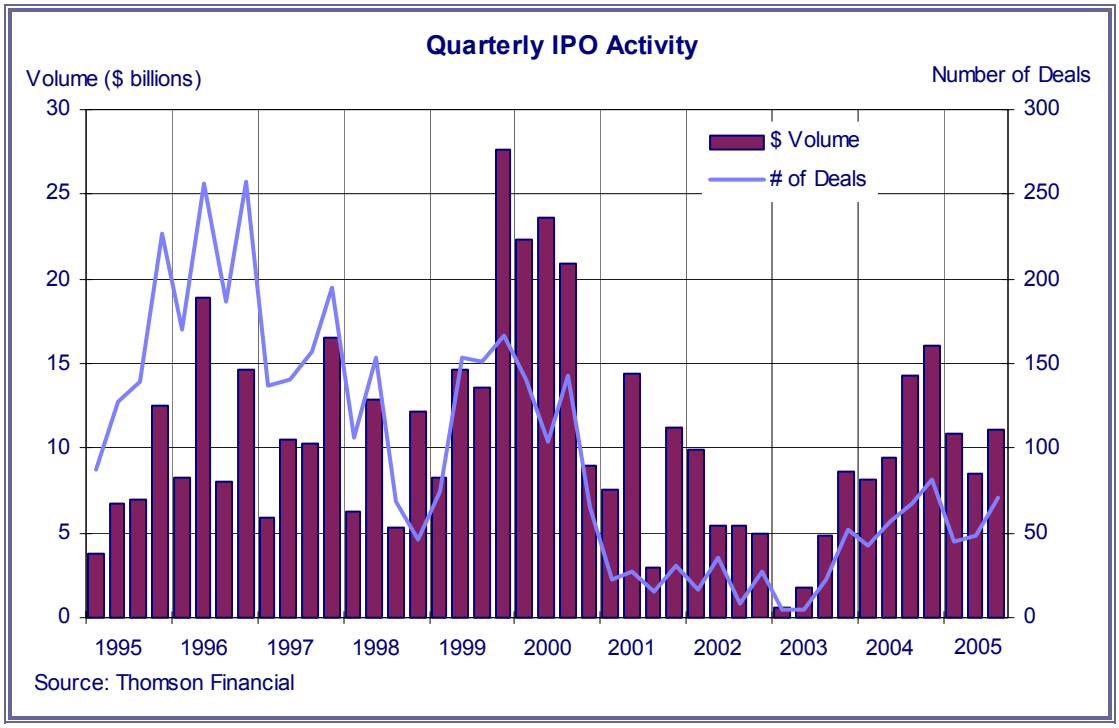
Equity Underwriting – Total equity underwriting activity picked up significantly in the third quarter, as a sharp increase in common stock offerings was enough to outweigh a decline in preferred stock offerings. Activity was surprisingly strong in August and September, with total equity offerings increasing 11.1% in September to $25.1 billion, a 19-month high. In the third quarter, dollar proceeds from equity offerings totaled $56.7 billion, 37.0% above 2Q'05 levels and 30.4% above year-earlier levels. Year-to-date, however, equity issuance was down 8.9% to $142.0 billion compared with $155.8 billion a year ago.



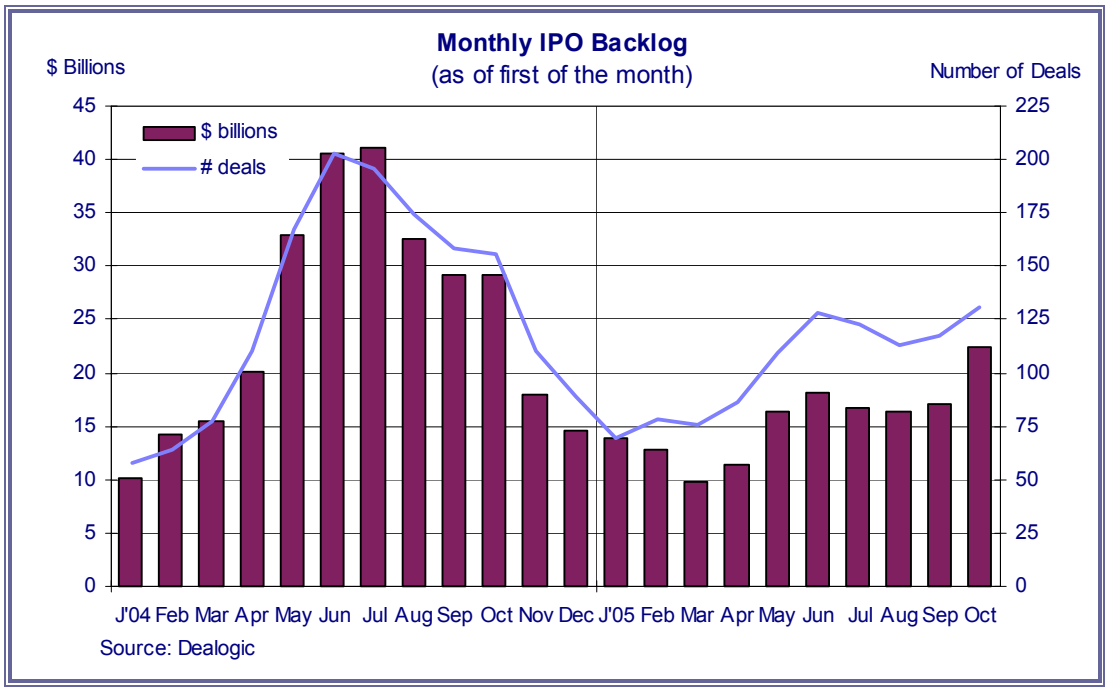


Initial Public Offerings (IPOs) – The U.S. IPO market fell back to earth in September in reaction to turbulent market conditions. After soaring 120% in August to $6.6 billion, IPO volume dropped 77% in September to $1.5 billion. Still, third-quarter volume increased 30.2% to $11.0 billion from the second quarter of 2005, and ranked as the busiest quarter of the year. Although up for the quarter, year-to-date IPO volume of $30.4 billion was 4.9% below last year's first nine-month total of $31.9 billion.

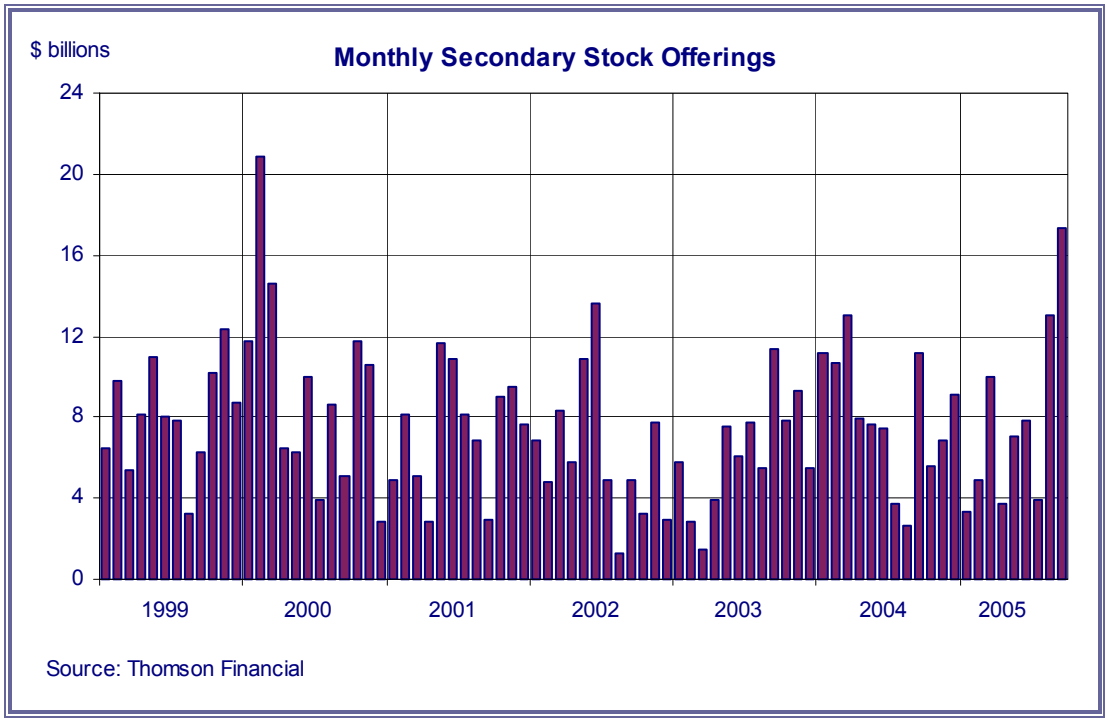


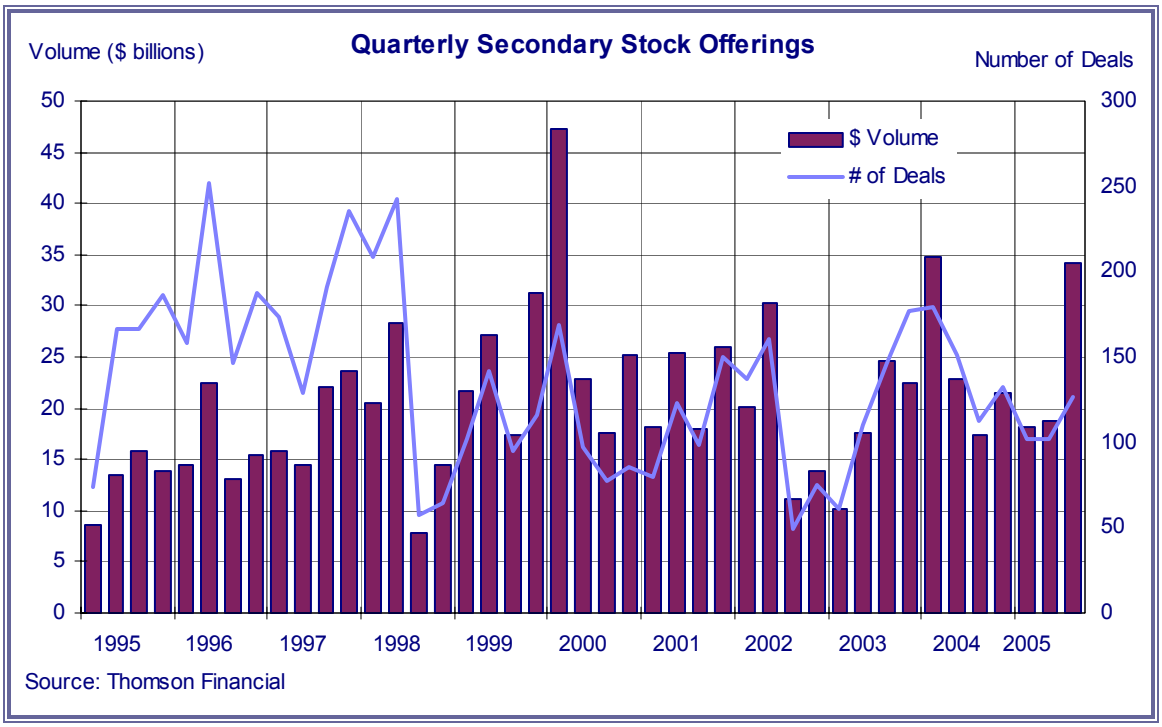


The backlog of filed U.S. IPOs grew 30% month-to-month to $22.4 billion as of October 1 and now stands at its highest level in a year, implying a more active market during the final quarter of 2005.

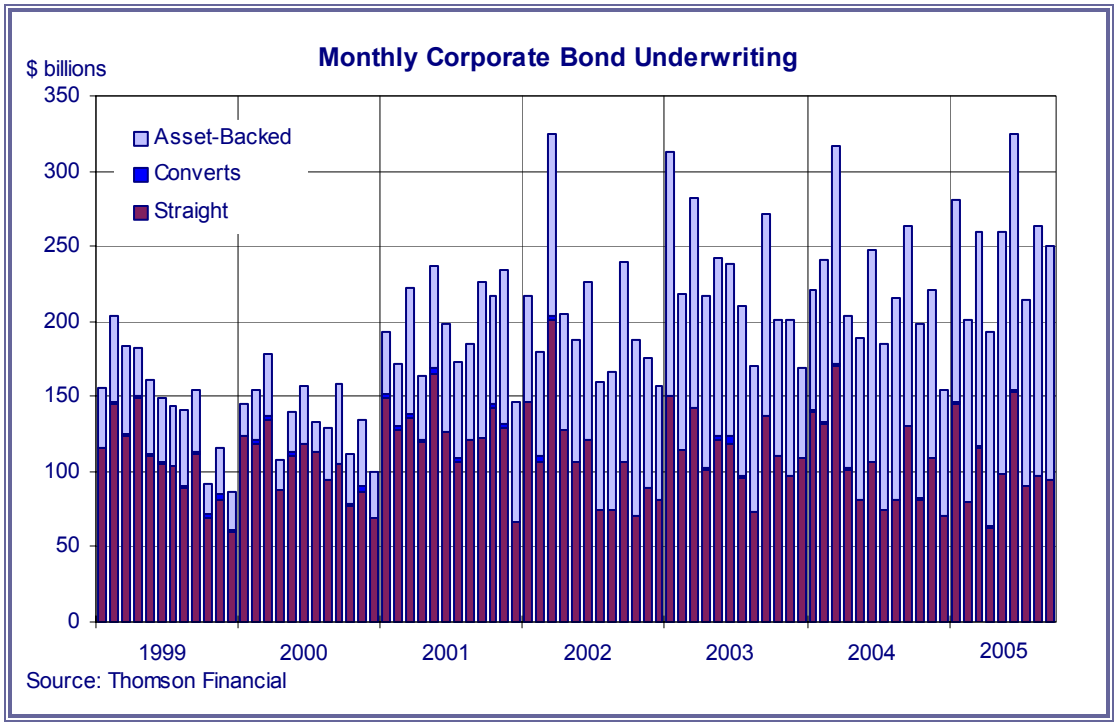


Secondary common stock issuance shot up 33.1% in September $17.3 billion, the best monthly showing since February 2000's record $20.9 billion. Google's secondary offering, which raised $4.18 billion, accounted for nearly one-fourth of September's total proceeds. That lifted the 3Q'05 total to $34.3 billion, up 83.4% from 2Q'05 levels and 96.5% above 3Q'04 levels. Even so, secondary common stock issuance year-to-date, at $71.2 billion, is down 5.3% from $75.2 billion in the same, year-earlier period.

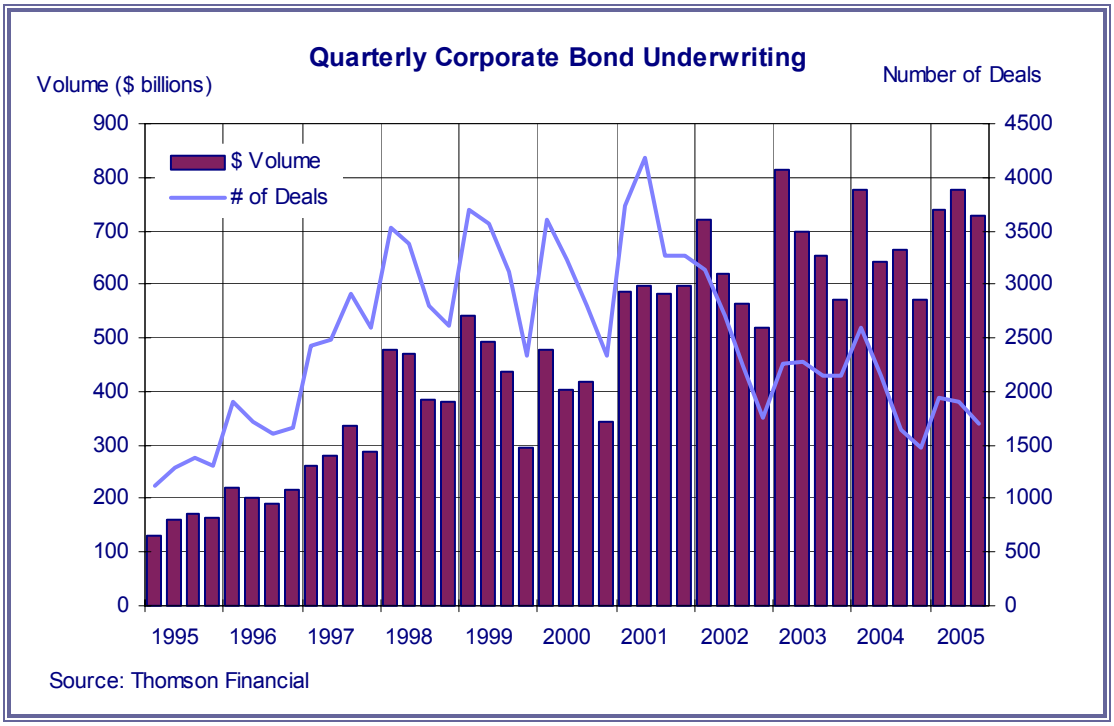




Corporate Bond Underwriting – Total corporate debt underwriting activity slowed in the third quarter amid tightening credit conditions. New debt issuance slipped 5.2% from August's level to $249.7 billion in September, bringing the 3Q'05 total to $726.9 billion. That was down 6.4% from 2Q'05 and marked the slowest quarter of the year. Despite the recent slowdown, the $2.24 trillion raised in this year's first nine months represented a 7.8% increase over the $2.08 trillion raised during the same period last year.



Volume this year has been driven up by a surge in offerings of asset-backed securities, which was the only category of debt product to register an increase over last year's results, primarily due to the continuing housing boom. During the first nine months of 2005, asset-backed securities issuance totaled $1.30 trillion, up 22.8% from the $1.06 trillion issued in the similar, year-ago period.



Grace Toto
Vice President and Director, Statistics

U.S. CORPORATE UNDERWRITING ACTIVITY

(In $ Billions)

	Straight Corporate Debt	Con-vertible Debt	Asset-Backed Debt	TOTAL **DEBT**	Common Stock	Preferred Stock	TOTAL **EQUITY**	All IPOs	"True" IPOs	Secondaries	**TOTAL** UNDER-**WRITINGS**
1985	76.4	7.5	20.8	104.7	24.7	8.6	33.3	8.5	8.4	16.2	138.0
1986	149.8	10.1	67.8	227.7	43.2	13.9	57.1	22.3	18.1	20.9	284.8
1987	117.8	9.9	91.7	219.4	41.5	11.4	52.9	24.0	14.3	17.5	272.3
1988	120.3	3.1	113.8	237.2	29.7	7.6	37.3	23.6	5.7	6.1	274.5
1989	134.1	5.5	135.3	274.9	22.9	7.7	30.6	13.7	6.1	9.2	305.5
1990	107.7	4.7	176.1	288.4	19.2	4.7	23.9	10.1	4.5	9.0	312.3
1991	203.6	7.8	300.0	511.5	56.0	19.9	75.9	25.1	16.4	30.9	587.4
1992	319.8	7.1	427.0	753.8	72.5	29.3	101.8	39.6	24.1	32.9	855.7
1993	448.4	9.3	474.8	932.5	102.4	28.4	130.8	57.4	41.3	45.0	1,063.4
1994	381.2	4.8	253.5	639.5	61.4	15.5	76.9	33.7	28.3	27.7	716.4
1995	466.0	6.9	152.4	625.3	82.0	15.1	97.1	30.2	30.0	51.8	722.4
1996	564.8	9.3	252.9	827.0	115.5	36.5	151.9	50.0	49.9	65.5	979.0
1997	769.8	8.5	385.6	1,163.9	120.2	33.3	153.4	44.2	43.2	75.9	1,317.3
1998	1,142.5	6.3	566.8	1,715.6	115.0	37.8	152.7	43.7	36.6	71.2	1,868.3
1999	1,264.8	16.1	487.1	1,768.0	164.3	27.5	191.7	66.8	64.3	97.5	1,959.8
2000	1,236.2	17.0	393.4	1,646.6	189.1	15.4	204.5	76.1	75.8	112.9	1,851.0
2001	1,511.2	21.6	832.5	2,365.4	128.4	41.3	169.7	40.8	36.0	87.6	2,535.1
2002	1,303.2	8.6	1,115.4	2,427.2	116.4	37.6	154.0	41.2	25.8	75.2	2,581.1
2003	1,370.7	10.6	1,352.3	2,733.6	118.5	37.8	156.3	43.7	15.9	74.8	2,889.9
2004	1,278.4	5.5	1,372.3	2,656.2	169.6	33.2	202.7	72.8	47.9	96.7	2,859.0
2004											
Jan	139.4	1.4	80.3	221.1	15.6	2.6	18.2	4.4	0.5	11.2	239.2
Feb	132.2	0.7	108.1	240.9	20.5	6.9	27.4	9.8	5.4	10.7	268.2
Mar	170.5	0.6	145.2	316.2	19.8	3.1	22.8	6.7	2.2	13.0	339.1
Apr	101.6	0.3	101.9	203.9	12.0	2.1	14.1	4.1	1.8	7.9	218.0
May	81.4	0.1	108.1	189.6	12.2	4.8	17.0	4.6	3.8	7.6	206.6
June	107.0	0.0	140.6	247.6	11.8	1.0	12.9	4.5	3.8	7.4	260.5
July	74.2	0.0	110.7	184.9	11.2	1.0	12.2	7.5	6.3	3.7	197.1
Aug	81.0	0.0	134.7	215.7	8.6	4.8	13.4	6.0	5.2	2.6	229.1
Sept	130.5	0.6	132.1	263.2	15.2	2.7	17.9	4.0	2.8	11.2	281.1
Oct	81.0	1.1	115.6	197.7	14.4	1.9	16.3	8.8	6.2	5.6	214.0
Nov	108.7	0.4	111.7	220.9	11.8	1.3	13.1	5.0	4.0	6.9	234.0
Dec	70.9	0.3	83.5	154.6	16.5	1.0	17.5	7.4	5.8	9.1	172.1
2005											
Jan	145.6	0.2	135.6	281.3	8.2	0.7	8.9	4.9	2.1	3.3	290.2
Feb	80.4	0.0	120.1	200.5	14.7	1.7	16.4	9.8	7.1	4.9	216.9
Mar	116.0	0.5	142.8	259.3	14.4	4.3	18.7	4.4	1.6	10.0	278.0
Apr	62.4	0.8	129.3	192.5	6.0	1.6	7.6	2.2	0.8	3.8	200.1
May	98.3	0.0	161.6	259.9	11.9	2.0	13.9	4.8	3.0	7.0	273.7
June	152.5	2.0	169.9	324.4	14.4	5.5	19.9	6.5	4.7	7.9	344.3
July	90.7	0.0	123.1	213.7	7.7	1.3	9.0	3.8	3.0	3.9	222.7
Aug	97.3	0.0	166.1	263.4	21.3	1.3	22.6	8.3	6.6	13.0	286.1
Sept	94.4	0.0	155.4	249.7	21.1	4.0	25.1	3.7	1.5	17.3	274.8
YTD '04	1,017.8	3.7	1,061.6	2,083.0	126.8	29.0	155.8	51.6	31.9	75.2	2,238.8
YTD '05	937.5	3.5	1,303.8	2,244.8	119.7	22.3	142.0	48.5	30.4	71.2	2,386.8
% Change	-7.9%	-4.7%	22.8%	7.8%	-5.6%	-23.1%	-8.9%	-6.0%	-4.9%	-5.3%	6.6%

Note: IPOs and secondaries are subsets of common stock. "True" IPOs exclude closed-end funds.
Source: Thomson Financial

MUNICIPAL BOND UNDERWRITINGS

(In $ Billions)

INTEREST RATES

(Averages)

	Compet. Rev. Bonds	Nego. Rev. Bonds	**TOTAL REVENUE BONDS**	Compet. G.O.s	Nego. G.O.s	**TOTAL G.O.s**	**TOTAL MUNICIPAL BONDS**	3-Mo. T Bills	10-Year Treasuries	SPREAD
1985	10.2	150.8	161.0	17.6	22.8	40.4	201.4	7.47	10.62	3.15
1986	10.0	92.6	102.6	23.1	22.6	45.7	148.3	5.97	7.68	1.71
1987	7.1	64.4	71.5	16.3	14.2	30.5	102.0	5.78	8.39	2.61
1988	7.6	78.1	85.7	19.2	12.7	31.9	117.6	6.67	8.85	2.18
1989	9.2	75.8	85.0	20.7	17.2	37.9	122.9	8.11	8.49	0.38
1990	7.6	78.4	86.0	22.7	17.5	40.2	126.2	7.50	8.55	1.05
1991	11.0	102.1	113.1	29.8	28.1	57.9	171.0	5.38	7.86	2.48
1992	12.5	139.0	151.6	32.5	49.0	81.5	233.1	3.43	7.01	3.58
1993	20.0	175.6	195.6	35.6	56.7	92.4	287.9	3.00	5.87	2.87
1994	15.0	89.2	104.2	34.5	23.2	57.7	161.9	4.25	7.09	2.84
1995	13.5	81.7	95.2	27.6	32.2	59.8	155.0	5.49	6.57	1.08
1996	15.6	100.1	115.7	31.3	33.2	64.5	180.2	5.01	6.44	1.43
1997	12.3	130.2	142.6	35.5	36.5	72.0	214.6	5.06	6.35	1.29
1998	21.4	165.6	187.0	43.7	49.0	92.8	279.8	4.78	5.26	0.48
1999	14.3	134.9	149.2	38.5	31.3	69.8	219.0	4.64	5.65	1.01
2000	13.6	116.2	129.7	35.0	29.3	64.3	194.0	5.82	6.03	0.21
2001	17.6	164.2	181.8	45.5	56.3	101.8	283.5	3.39	5.02	1.63
2002	19.5	210.5	230.0	52.3	73.1	125.4	355.4	1.60	4.61	3.01
2003	21.1	215.8	236.9	54.7	87.7	142.4	379.3	1.01	4.02	3.00
2004	17.2	209.8	227.1	51.5	77.7	129.2	356.3	1.37	4.27	2.90
2004										
Jan	0.7	10.4	11.1	3.6	5.7	9.3	20.4	0.88	4.15	3.27
Feb	1.0	13.0	14.1	4.8	7.7	12.5	26.5	0.93	4.08	3.15
Mar	2.7	19.7	22.4	5.6	10.5	16.1	38.5	0.94	3.83	2.89
Apr	1.0	18.1	19.0	3.5	8.2	11.8	30.8	0.94	4.35	3.41
May	1.4	28.0	29.5	3.1	4.7	7.8	37.2	1.02	4.72	3.70
June	1.3	24.0	25.3	4.5	5.4	9.8	35.1	1.27	4.73	3.46
July	1.8	14.6	16.5	5.1	3.7	8.9	25.3	1.33	4.50	3.17
Aug	0.6	15.5	16.1	4.0	7.6	11.6	27.7	1.48	4.28	2.80
Sept	1.7	13.2	14.9	5.3	4.8	10.1	25.0	1.65	4.13	2.48
Oct	2.4	17.7	20.0	5.3	6.5	11.8	31.9	1.76	4.10	2.34
Nov	1.1	17.2	18.3	2.3	4.6	6.8	25.1	2.07	4.19	2.12
Dec	1.5	18.5	20.0	4.5	8.3	12.7	32.7	2.19	4.23	2.04
2005										
Jan	1.0	11.7	12.7	3.6	6.6	10.1	22.8	2.33	4.22	1.89
Feb	1.5	15.6	17.1	4.5	9.2	13.6	30.7	2.54	4.17	1.63
Mar	1.2	24.1	25.3	7.2	12.5	19.7	44.9	2.74	4.50	1.76
Apr	1.9	16.5	18.4	5.1	8.0	13.1	31.5	2.76	4.34	1.58
May	1.3	21.1	22.4	4.1	9.5	13.6	36.0	2.84	4.14	1.30
June	2.4	25.4	27.9	7.1	9.5	16.6	44.5	2.97	4.00	1.03
July	1.5	21.6	23.1	3.8	7.1	10.9	33.9	3.22	4.18	0.96
Aug	1.3	21.7	23.0	4.3	6.3	10.6	33.6	3.44	4.26	0.82
Sept	2.2	16.6	18.8	5.0	6.5	11.4	30.2	3.42	4.20	0.78
YTD '04	12.2	156.5	168.8	39.4	58.4	97.8	266.6	1.16	4.31	3.15
YTD '05	14.3	174.2	188.5	44.7	75.0	119.7	308.2	2.92	4.22	1.31
% Change	16.8%	11.3%	11.7%	13.2%	28.6%	22.4%	15.6%	151.5%	-2.0%	-58.5%

Sources: Thomson Financial; Federal Reserve

	STOCK MARKET PERFORMANCE INDICES (End of Period)				STOCK MARKET VOLUME (Daily Avg., Mils. of Shs.)			VALUE TRADED (Daily Avg., $ Bils.)	
	Dow Jones Industrial Average	S&P 500	NYSE Composite	NASDAQ Composite	NYSE	AMEX	NASDAQ	NYSE	NASDAQ
1985	1,546.67	211.28	1,285.66	324.93	109.2	8.3	82.1	3.9	0.9
1986	1,895.95	242.17	1,465.31	348.83	141.0	11.8	113.6	5.4	1.5
1987	1,938.83	247.08	1,461.61	330.47	188.9	13.9	149.8	7.4	2.0
1988	2,168.57	277.72	1,652.25	381.38	161.5	9.9	122.8	5.4	1.4
1989	2,753.20	353.40	2,062.30	454.82	165.5	12.4	133.1	6.1	1.7
1990	2,633.66	330.22	1,908.45	373.84	156.8	13.2	131.9	5.2	1.8
1991	3,168.83	417.09	2,426.04	586.34	178.9	13.3	163.3	6.0	2.7
1992	3,301.11	435.71	2,539.92	676.95	202.3	14.2	190.8	6.9	3.5
1993	3,754.09	466.45	2,739.44	776.80	264.5	18.1	263.0	9.0	5.3
1994	3,834.44	459.27	2,653.37	751.96	291.4	17.9	295.1	9.7	5.8
1995	5,117.12	615.93	3,484.15	1,052.13	346.1	20.1	401.4	12.2	9.5
1996	6,448.27	740.74	4,148.07	1,291.03	412.0	22.1	543.7	16.0	13.0
1997	7,908.25	970.43	5,405.19	1,570.35	526.9	24.4	647.8	22.8	17.7
1998	9,181.43	1,229.23	6,299.93	2,192.69	673.6	28.9	801.7	29.0	22.9
1999	11,497.12	1,469.25	6,876.10	4,069.31	808.9	32.7	1,081.8	35.5	43.7
2000	10,786.85	1,320.28	6,945.57	2,470.52	1,041.6	52.9	1,757.0	43.9	80.9
2001	10,021.50	1,148.08	6,236.39	1,950.40	1,240.0	65.8	1,900.1	42.3	44.1
2002	8,341.63	879.82	5,000.00	1,335.51	1,441.0	63.7	1,752.8	40.9	28.8
2003	10,453.92	1,111.92	6,440.30	2,003.37	1,398.4	67.1	1,685.5	38.5	28.0
2004	10,783.01	1,211.92	7,250.06	2,175.44	1,456.7	65.6	1,801.3	46.1	34.6
2004									
Jan	10,488.07	1,131.13	6,551.63	2,066.15	1,663.1	83.5	2,331.7	50.3	40.9
Feb	10,583.92	1,144.94	6,692.37	2,029.82	1,481.2	75.6	1,917.2	46.3	36.5
Mar	10,357.70	1,126.21	6,599.06	1,994.22	1,477.5	77.3	1,880.6	47.1	34.9
Apr	10,225.57	1,107.30	6,439.42	1,920.15	1,524.7	78.3	1,950.8	49.0	37.3
May	10,188.45	1,120.68	6,484.72	1,986.74	1,500.0	72.1	1,663.6	46.9	32.3
June	10,435.48	1,140.84	6,602.99	2,047.79	1,371.4	57.4	1,623.3	43.5	32.9
July	10,139.71	1,101.72	6,403.15	1,887.36	1,418.1	54.1	1,734.8	44.1	33.2
Aug	10,173.92	1,104.24	6,454.22	1,838.10	1,243.5	49.9	1,431.0	37.7	26.7
Sept	10,080.27	1,114.58	6,570.25	1,896.84	1,322.2	52.7	1,510.7	41.8	29.1
Oct	10,027.47	1,130.20	6,692.71	1,974.99	1,543.5	61.3	1,730.7	49.5	34.5
Nov	10,428.02	1,173.82	7,005.72	2,096.81	1,494.4	68.5	1,827.6	49.0	38.0
Dec	10,783.01	1,211.92	7,250.06	2,175.44	1,463.3	63.3	2,042.2	48.4	39.9
2005									
Jan	10,489.94	1,181.27	7,089.83	2,062.41	1,618.4	62.5	2,172.3	54.1	45.5
Feb	10,766.23	1,203.60	7,321.23	2,051.72	1,578.2	62.7	1,950.2	54.5	43.2
Mar	10,503.76	1,180.59	7,167.53	1,999.23	1,682.6	66.7	1,849.0	59.1	38.8
Apr	10,192.51	1,156.85	7,008.32	1,921.65	1,692.8	61.7	1,839.2	58.8	39.6
May	10,467.48	1,191.50	7,134.33	2,068.22	1,502.1	52.9	1,685.6	50.8	36.6
June	10,274.97	1,191.33	7,217.78	2,056.96	1,515.8	58.0	1,747.9	52.5	39.4
July	10,640.91	1,234.18	7,476.66	2,184.83	1,478.9	58.8	1,621.8	53.1	37.8
Aug	10,481.60	1,220.33	7,496.09	2,152.09	1,441.4	61.9	1,538.9	51.3	34.1
Sept	10,568.70	1,228.81	7,632.98	2,151.69	1,683.0	70.5	1,716.5	60.6	37.5
YTD '04	10,080.27	1,114.58	6,570.25	1,896.84	1,442.1	66.6	1,778.1	45.1	34.2
YTD '05	10,568.70	1,228.81	7,632.98	2,151.69	1,576.1	61.7	1,785.9	55.0	39.1
% Change	4.8%	10.2%	16.2%	13.4%	9.3%	-7.3%	0.4%	21.8%	14.1%

MUTUAL FUND ASSETS
($ Billions)

	Equity	Hybrid	Bond	Money Market	**TOTAL ASSETS**
1985	116.9	12.0	122.6	243.8	495.4
1986	161.4	18.8	243.3	292.2	715.7
1987	180.5	24.2	248.4	316.1	769.2
1988	194.7	21.1	255.7	338.0	809.4
1989	248.8	31.8	271.9	428.1	980.7
1990	239.5	36.1	291.3	498.3	1,065.2
1991	404.7	52.2	393.8	542.5	1,393.2
1992	514.1	78.0	504.2	546.2	1,642.5
1993	740.7	144.5	619.5	565.3	2,070.0
1994	852.8	164.5	527.1	611.0	2,155.4
1995	1,249.1	210.5	598.9	753.0	2,811.5
1996	1,726.1	252.9	645.4	901.8	3,526.3
1997	2,368.0	317.1	724.2	1,058.9	4,468.2
1998	2,978.2	364.7	830.6	1,351.7	5,525.2
1999	4,041.9	383.2	808.1	1,613.1	6,846.3
2000	3,962.0	346.3	811.1	1,845.2	6,964.7
2001	3,418.2	346.3	925.1	2,285.3	6,975.0
2002	2,667.0	327.4	1,124.9	2,272.0	6,391.3
2003	3,684.8	436.7	1,240.9	2,051.7	7,414.1
2004	4,384.1	519.3	1,290.3	1,913.2	8,106.9
2004					
Jan	3,804.2	440.7	1,256.6	2,032.1	7,533.7
Feb	3,893.5	452.7	1,267.2	2,015.2	7,628.6
Mar	3,885.1	455.7	1,277.7	2,006.8	7,625.4
Apr	3,811.3	452.5	1,245.7	1,964.2	7,473.7
May	3,855.0	457.1	1,223.3	1,974.6	7,510.0
June	3,948.0	467.0	1,220.9	1,954.3	7,590.3
July	3,798.5	461.6	1,231.7	1,950.7	7,442.6
Aug	3,805.8	469.1	1,255.5	1,941.5	7,471.9
Sept	3,916.5	479.0	1,263.9	1,903.6	7,563.0
Oct	3,994.1	487.4	1,277.8	1,891.4	7,650.7
Nov	4,222.3	504.5	1,276.5	1,920.2	7,923.5
Dec	4,384.1	519.3	1,290.3	1,913.2	8,106.9
2005					
Jan	4,289.2	516.7	1,302.0	1,892.9	8,000.8
Feb	4,416.8	529.9	1,304.6	1,875.6	8,126.9
Mar	4,348.8	526.4	1,294.1	1,875.8	8,045.0
Apr	4,247.1	523.7	1,305.7	1,842.7	7,919.2
May	4,406.6	535.9	1,321.9	1,859.3	8,123.7
June	4,471.2	544.9	1,334.8	1,866.3	8,217.2
July	4,669.8	555.7	1,337.9	1,883.6	8,447.0
Aug	4,677.8	558.6	1,359.0	1,922.6	8,518.0
YTD '04	3,805.8	469.1	1,255.5	1,941.5	7,471.9
YTD '05	4,677.8	558.6	1,359.0	1,922.6	8,518.0
% Change	22.9%	19.1%	8.2%	-1.0%	14.0%

MUTUAL FUND NET NEW CASH FLOW*
($ Billions)

	Equity	Hybrid	Bond	Money Market	**TOTAL**	Total Long-Term Funds
1985	8.5	1.9	63.2	-5.4	68.2	73.6
1986	21.7	5.6	102.6	33.9	163.8	129.9
1987	19.0	4.0	6.8	10.2	40.0	29.8
1988	-16.1	-2.5	-4.5	0.1	-23.0	-23.1
1989	5.8	4.2	-1.2	64.1	72.8	8.8
1990	12.8	2.2	6.2	23.2	44.4	21.2
1991	39.4	8.0	58.9	5.5	111.8	106.3
1992	78.9	21.8	71.0	-16.3	155.4	171.7
1993	129.4	39.4	73.3	-14.1	228.0	242.1
1994	118.9	20.9	-64.6	8.8	84.1	75.2
1995	127.6	5.3	-10.5	89.4	211.8	122.4
1996	216.9	12.3	2.8	89.4	321.3	232.0
1997	227.1	16.5	28.4	102.1	374.1	272.0
1998	157.0	10.2	74.6	235.3	477.1	241.8
1999	187.7	-12.4	-5.5	193.6	363.4	169.8
2000	309.4	-30.7	-49.8	159.6	388.6	228.9
2001	31.9	9.5	87.7	375.6	504.8	129.2
2002	-27.7	8.6	140.3	-46.7	74.5	121.2
2003	152.3	32.6	31.0	-258.5	-42.6	215.8
2004	177.7	42.6	-10.6	-156.8	52.9	209.7
2004						
Jan	43.0	5.4	-0.3	-19.5	28.7	48.2
Feb	26.2	5.0	1.5	-20.9	11.8	32.7
Mar	15.6	4.8	7.5	-9.0	18.8	27.8
Apr	23.0	4.6	-7.8	-44.1	-24.3	19.8
May	0.4	2.3	-16.2	8.6	-4.9	-13.5
June	10.0	2.4	-7.5	-21.0	-16.1	4.9
July	9.4	3.0	-1.2	-2.1	9.1	11.2
Aug	1.2	2.6	4.2	-10.3	-2.4	8.0
Sept	10.3	3.0	2.8	-42.4	-26.3	16.1
Oct	7.2	3.5	3.6	-14.1	0.1	14.2
Nov	21.4	4.1	2.0	26.5	54.0	27.6
Dec	10.2	1.9	0.8	-8.1	4.9	13.0
2005						
Jan	10.0	5.3	4.6	-27.5	-7.6	19.9
Feb	22.2	4.4	2.6	-18.9	10.2	29.2
Mar	15.1	3.9	-1.3	-2.3	15.5	17.8
Apr	8.6	2.6	1.2	-35.4	-23.0	12.4
May	11.2	2.3	3.5	13.8	30.8	17.0
June	6.2	2.1	4.1	3.0	15.3	12.3
July	10.0	1.5	7.3	13.9	32.6	18.7
Aug	6.3	1.8	7.3	32.5	47.9	15.4
YTD '04	128.7	30.1	-19.8	-118.3	20.8	139.1
YTD '05	89.5	23.8	29.3	-20.9	121.7	142.6
% Change	-30.4%	-21.1%	NM	NM	485.6%	2.5%

* New sales (excluding reinvested dividends) minus redemptions, combined with net exchanges
Source: Investment Company Institute

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