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## MARKET STRUCTURE AND REG NMS: NEW WORLD, NEW RULES

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## REGIONAL FIRMS: INCREASINGLY RETAIL-ORIENTED, BUT HOLDING THEIR OWN

*Rob Mills*

## MONTHLY STATISTICAL REVIEW

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# Table of Contents

# MARKET STRUCTURE AND REG NMS: NEW WORLD, NEW RULES

## Summary

Several recent events have put the spotlight back on market structure issues. On April 6 the U.S. Securities and Exchange Commission approved by a three-to-two vote Regulation NMS – a new rule that restructures and regulates the national market system for trading equity securities.[1] Soon after, two major securities markets announced landmark deals: The New York Stock Exchange (NYSE) plan to demutualize and merge with the Archipelago Exchange (ArcaEx)[2] and the NASDAQ stock market's plan to purchase the remaining part of the Instinet Group that it did not already own.[3] The marketplace deals and Reg NMS were then the subject of Senate hearings[4] held on May 18 and 19, and the Securities Industry Association Market Structure Conference[5] on May 20.

While the SEC voted on Reg NMS in April, the publication of the rule was long delayed. Reg NMS was finally published on the SEC Web site[6] on June 9, pushing printers and readers to the limit as it topped out at more than 500 pages and nearly 1,000 footnotes. It may take some time for most interested parties to plow through the entire document, but within a week market experts were publishing summaries and digests of the lengthy rule. This article will focus on the discussions and presentations made at the SIA Market Structure Conference; the highlights of the final release of Reg NMS; and, finally, on what recent events and rule changes might mean for the future of the national equity markets and market participants.

## SIA Market Structure Conference

The May 20 SIA Market Structure Conference delved into several areas of interest, which may roughly be broken down as: Reg NMS and the impact of regulatory change over the years; challenges to the buy side and sell side of changing market structure; the new market environment; reform of self-regulatory organizations; and, the future for market structure developments. Reg NMS dominated most panel discussions. However, a lot of the content was speculative in nature because the rule had not yet been published. Although this article will tackle the published Reg NMS in the following section, it will also provide a short summary of some of the opinions offered at the conference while participants were still unsure of the final wording.

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[1] SEC April 7, 2005 press release, www.sec.gov/news/press/2005-48.htm.

[2] NYSE and Archipelago's April 20, 2005 joint press release, www.nyse.com/pdfs/joint_release.pdf.

[3] NASDAQ April 22, 2005 press release, www.nasdaq.com/newsroom/news/pr2005/ne_section05_044.stm.

[4] See banking.senate.gov/index.cfm?Fuseaction=Hearings.Detail&HearingID=156 for May 18, 2005 testimony and banking.senate.gov/index.cfm?Fuseaction=Hearings.Detail&HearingID=155 for May 19, 2005 testimony.

[5] See www.sia.com/ms2005/ for SIA Market Structure Conference description and available presentations.

[6] SEC Reg NMS final rule [Release No. 34- 51808; File No. S7-10-04], www.sec.gov/rules/final/34-51808.pdf; and Dissent, www.sec.gov/rules/final/34-51808-dissent.pdf.

***Reg NMS and the New Trade Through and Access Rules*** – The panelists offered a short list of suggestions to market participants and the SEC in regard to the yet-to-be published rules. These included:

- Carefully examine the rules when they are released – look for unexpected changes;
- Consider a slower phase-in process – the increase in message traffic alone will be staggering;
- Permit private linkages and set minimum standards;
- Provide specific guidance for surveillance and compliance;
- Define what constitutes 'fast' and 'slow' markets. Who should define it and how? More than 6,000 shares are traded in 10 national markets and there are tens of thousands of seconds in every trading day; and,
- Clarify how to deal with slow (*i.e.*, manual) markets.

Overall, panelists worried about unnecessarily swift implementation of a rule that, while it sounds nice, could be risky; slower implementation would allow for recognition of unintended consequences before they become established problems. Some panelists were also apprehensive about the potential amount of work for markets and orders to behave as mandated by the then-forthcoming Reg NMS (especially in the compliance areas) to make sure their systems can comply with the rule requirements. Such areas include the ability of broker-dealers and/or markets, depending on the specific requirement, to flag different types of quotes and orders, such as fast vs. slow quotes, sweep orders or block trades. Some areas of compliance, both initial and ongoing, will rely heavily on technology, some of which will be supplied by third parties, but all of which broker-dealers must ensure complies with the rules. Definition of terms was also an area of panel discussion. There are many defined terms in the Reg NMS rules, and their definitions will be very important in determining how to comply with the rules.

Market structure changes over the past decade or so include the development and explosive growth of electronic markets and order-routing technology, which have lowered competitive barriers and revolutionized how trading is done. Market participants may or may not consider Reg NMS the next step in the evolution of market structure, but resolution of some of these market structure issues was welcomed. Some commented that the two major market-consolidating deals announced shortly after Reg NMS' adoption implied that the market was waiting for a resolution, and once it received it, was ready to move on. Market demutualization and consolidation is a trend seen domestically and overseas, and the combined NYSE/ArcaEx and NASDAQ/Instinet believe that their mergers will make them more robust competitors.

***Impact of Market Structure Changes on the Buy Side and the Sell Side*** – Panelists discussed the evolution of market structure and its impact on the way investors and broker-dealers conduct their businesses. The prevalence of ***algorithmic trading***[7] and the broker-dealer provision of capital commitments were cited as two of the most influential recent developments. Both sides agreed that Reg NMS will not hinder – and indeed may encourage more – algorithmic trading as the buy side figures out how best to execute in a more automated environment. Whether or

[7] Terms highlighted in ***bold blue italics*** are defined in the glossary at the end of this piece.

not capital commitments and ***block trading*** would be hindered by the new rules was deemed unclear, as the details of the rules were yet unknown. A panelist commented that although buy-side firms might want to continue to commit capital, Reg NMS might force them to alter the mechanics of doing so.

The compression of equity commissions and increased regulatory requirements and costs, among other causes, have led to cost-saving reductions in staffing on the sell side and greater reliance on technological solutions, a trend also driven by client demand. Buy-side panelists, while agreeing that taking control of their own order flow through direct market access and algorithms has been a benefit, also look to the sell side for a variety of services delivered in different ways – not only technology and algorithms.

Another topic discussed by this panel was the future of ***soft dollars*** and the potential for ***unbundling*** requirements. Panelists discussed the likelihood of new requirements calling for more meaningful disclosure of the use and value of soft dollars, which may lead to changes in the way research is paid for and delivered. Such requirements would impact both the buy side and the sell side. Panelists discussed the difficulty in determining how a commission is split when it may include such services and products as research, pre-trade analytics, execution services and capital commitment, to name a few possibilities. According to one panelist, firms are already working on how to break down commissions ahead of expected future disclosure requirements. How such requirements ultimately impact the availability of products and services, delivery methods, and pricing was left an open question.

***SRO Structure and Market Data*** – The panel discussed recent SEC actions regarding SROs and the impact that recently announced mergers might have. One panelist discussed the pros and cons of self-regulation, not the least of which are the benefit of expertise vs. risk of conflicts of interest, and the need to make sure that business pressures do not overwhelm regulatory functions. Ways to overcome conflicts include separate management and oversight of market and regulatory functions and greater disclosure of the sources and uses of funds.

There was discussion of whether the two announced mergers would change anything, or give more urgency to the SEC's work on possible SRO overhaul. Panelists agreed there were many possible models, including SIA's existing hybrid SRO model[8], but that they did not expect any sudden changes. Panelists pointed out that there did not need to be a one-size-fits-all solution, and that the NASD/NASDAQ arrangement and the NYSE's split of regulatory and market functions and oversight might work equally well. Panelists agreed that there is a benefit to self-regulation and having the SRO connected to the industry via member participation, and that there were ways to have member input while also maintaining SRO independence.

The discussion moved on to that of market data and its associated revenue. One panelist pointed out that investors need market data, and should pay for it, but the price should be lower than it is currently. The observation was that the existing system of SROs operating a cartel arrangement led to overly high prices, and that it might be better to set up a single securities information processor (SIP), as opposed to the current multiple SIP system, to function as a utility on a cost-plus basis. According to the panelist, this would end the use of market-data fees to cross-subsidize other SRO functions and lower costs for investors.

[8] See www.sia.com/market_structure/html/siawhitepaperfinal.htm.

***Future of Market Structure*** – The final panel was made up of a particularly diverse group of market participants who discussed market structure issues past, present and future. From the point of view of the specialist, the new structure of the NYSE is the key to the future. Since the merger and hybrid market proposal were yet to be made final, the panelist could only speculate on the terms of the final outcome, which he believes will present plenty of business opportunities. The floor-trader panelist also sounded an optimistic note that the NYSE hybrid proposal, with an expanded auto-ex capability, would offer opportunities for floor brokers willing to adapt. One area of discussion concerning the role of the specialist that is rarely raised is the close relationship between an issuer and the specialist who makes a market in its stock, which should not be overlooked. A panelist also pointed out that specialists use algorithms to participate in the electronic market and that the floor brokers interact on the floor using more and better technology than previously. The panelists agreed that whoever offers the best market will win the business, and that one must add value to win diminishing commission dollars.

## Regulation NMS

Reg NMS was a contentious issue at the SEC throughout its development, with strong views on all sides, particularly on the issue of the order protection rule (formerly known as the ***trade through*** rule). Disagreement persisted into the Commissioners' meeting in which the rule was passed three-to-two, with the final publication of the rule including a dissent and a response to the dissent. The tone of the disagreement persists in the text of Reg NMS and the dissent. While market participants, observers and regulators may continue to disagree over aspects of the rule, as well as how it was arrived at, it is clear that most have moved on to find their own way within the new rule, and to work on making the best of what they may or may not agree is the correct way to protect investors.[9]

Reg NMS covers a wide range of topics related to market structure, which break down as follows[10]:

1. The Order Protection Rule (Rule 611) is designed to provide intermarket protection against trade throughs for all ***NMS stocks***;
2. The Access Rule (Rule 610) is designed to ensure that SRO trading facilities provide fair and non-discriminatory order execution access and limit the level of fees that may be charged for accessing a protected quotation;
3. The Sub-Penny Rule (Rule 612) prohibits the display, ranking or accepting of a bid or offer, or an order in NMS stocks priced in increments less than $0.01, unless the price of the share is lower than $1.00, in which case the minimum allowable increment is $0.0001; and
4. The Market Data Rules (Rules 601 and 603) and industry plans provide a new formula for allocating revenues to SROs based on trades and quotations, rather than on trades only as in the previous plan.

[9] In clear opposition to the new rules contained in Reg NMS, which were justified as necessary to protect investors, the dissenting SEC Commissioners stated that a better approach would have been "to improve access to quotations, enhance connectivity among markets and market participants, clarify the broker's duty of best execution, and reduce barriers to competition" (Dissent, p. 3).

[10] Descriptions of Reg NMS rules are drawn from the release itself and from summaries provided by law firms.

***Order Protection Rule*** – This rule went through the most vigorous debate and the most substantial changes. This rule was the most divisive part of Reg NMS. Opinion split down many lines, but most vociferously between supporters of the two market models represented by the NYSE and NASDAQ. Neither of the two models – one fully automated, one partially automated – are completely satisfied with the new rule as the proponents of automated markets do not believe order protection makes sense in their world, while the operators of the mixed model need time to bring auto-ex capability up to speed. In the end, both sides seemed ready to move on to adapting themselves to a new rule, rather than fighting what seemed inevitable.

The Order Protection Rule requires ***trading centers*** to establish, maintain, and enforce written policies and procedures reasonably designed to prevent the execution of trades at prices inferior to protected quotations displayed by other trading centers, or to comply with the requirements of an applicable exemption. Protected quotations are defined in the rule as ***automated quotations*** displayed by an automated trading center that are the top-of-book (best bid or offer, or BBO) of an exchange, NASDAQ, and the NASD's Alternative Display Facility. A trading center must be able to display automated quotations to qualify as an automated trading center, and must mark all quotations other than automated quotations as manual quotations.

The rule also contains exceptions to allow certain trading strategies and types of orders, although there is neither a generally available opt-out exemption nor one for block trades. Exemption types include but are not limited to: a trading center that finds that another trading center is experiencing material delay, failure or malfunction (self-help exemption); ***intermarket sweep orders***; ***flickering quotes***; and, ***benchmark trades***.

***Access Rule*** – This rule aims at preventing discrimination in accessing quotations at SRO trading facilities against those who indirectly access quotations relative to those who access them directly (members). The rule does not apply to other services that such markets generally provide only to their members. The rule does not mandate a collective linkage facility like the ***Intermarket Trading System*** (***ITS***) and allows private linkages. Access fees for protected quotations are limited to no more than $0.003 per share, unless the share price is less than $1.00, in which case the fee is limited to 0.1% of the quotation price. The rule also requires that SROs establish, maintain and enforce rules that require members reasonably to avoid displaying quotations that ***lock*** or ***cross*** protected quotations.

***Sub-Penny Rule*** – Market participants are prohibited by this rule from displaying, ranking or accepting a bid or offer, an order, or an indication of interest in NMS stocks priced in increments of less than $0.01, unless the price of the share is lower than $1.00, in which case the minimum allowable increment is $0.0001. The rule does not prohibit a sub-penny execution that results from a mid-point or volume-weighted algorithm.

***Market Data Rules*** – These rules contain a new formula for the allocation of market data revenue among the SROs that is based on both trades and quotations, which aims to reward contribution to public price discovery and which allocates revenues in a manner that reflects the usefulness to investors of the SROs' market information. The rule does not address the issue of market-data fee levels, reserving it for discussion in the context of SRO funding.[11] Other areas addressed included establishment of a non-voting advisory committee with representation of a variety of types of market participants and new rules concerning the distribution and display of market data.

[11] See SEC Concept Release Concerning Self-Regulation [Release No. 34-50700; File No. S7-40-04], www.sec.gov/rules/concept/34-50700.htm.

***Dissent*** – Two SEC Commissioners were strongly opposed to Reg NMS – in particular to the Order Protection Rule – and published a written dissent to accompany the publication of Reg NMS. In short, they are of the opinion that Reg NMS adds a redundant layer of regulatory costs and burdens and unnecessarily exposes markets to unforeseen consequences and they argued that there were other, better ways to improve market efficiency. While not likely to change anyone's mind, the dissent provides a substantive counterargument to the final rule. Also included in the body of Reg NMS is a response to the dissent that lays out the Commission's response to the arguments presented in the dissent.

## Future Developments in Market Structure

As difficult as it was a decade ago to imagine the electronic securities markets that operate today, trying today to imagine how markets will operate a decade hence seems even more so. Not only will the structure of the U.S. equity markets adapt to the new rules contained in Reg NMS and other new regulations, the managers of these markets also have to react to the requirements of market participants and the challenges posed by both homegrown and global competitors. Some examples of what types of changes may be forthcoming might help to illustrate the point.

***Implementation of Reg NMS*** – While the rules are now published, much is still unknown, as regulators and market participants – buy side, sell side and marketplaces – have to figure out how to implement the rules. Indeed, the SEC and the SROs have not yet dealt with such contentious issues as market-data fee levels, which will be taken up in the SRO context. Given that the 'devil is in the details', a regulation with more than 500 pages of details is truly daunting. A great deal of the impact of the new rule will depend on implementation and interpretation, and it is clear that additional guidance will be needed.

***Marketplace Developments*** – While the completion of NASDAQ's purchase of the Instinet Group may have been generally expected, the NYSE-ArcaEx merger was not. This merger would change not only the nature of the NYSE marketplace, but its corporate structure as well. Such changes will be welcomed by some and not by others, as vested interests must certainly compete. However, it seems clear that the merged entities (NASDAQ and NYSE) should be formidable competitors both at home and abroad – and that the merged NYSE will be more likely to rapidly embrace new technologies and market opportunities than the 'old' NYSE.

Some market participants expressed concern at the SIA conference over the creation of what some maintain will effectively be a duopoly, with two dominant players in the U.S., which presents a potential danger of rising prices. Others argued, however, that modern markets cannot hide from competition and pricing power is an unlikely consequence. What may be an interesting consequence is the addition of a greater range of products offered in the newly merged entities, which will add new layers of competition to a wider variety of exchanges and marketplaces.

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## Glossary[12]

***Algorithmic trading*** may be defined as the automated, computer-based execution of equity orders via direct market-access channels, usually with the goal of meeting a particular benchmark. Smart routing, program trading, and rules-based trading are some of the other terms used to describe algorithmic trading.*

***Alternative Trading System*** (***ATS***) means any organization, association, person, group of persons, or system that: (1) constitutes, maintains, or provides a marketplace or facilities for bringing together purchasers and sellers of securities or for otherwise performing with respect to securities the functions commonly performed by a stock exchange; and (2) does not: (i) set rules governing the conduct of subscribers other than the conduct of such subscribers' trading on such organization, association, person, group of persons, or system; or (ii) discipline subscribers other than by exclusion from trading.

***Automated quotation*** is defined as one displayed by a trading center that immediately and automatically: executes an order against the displayed quotation; cancels any unexecuted portion of the order without routing it elsewhere; transmits a response to the sender of the order indicating the action taken; and, updates the displayed quotation. No human intervention to determine the action taken with respect to the quotation is allowed after the time an order is received.

***Benchmark trades*** are those executed by types orders that are priced without reference to the quoted price of an NMS stock at the time of execution, such as volume-weighted average price orders.

***Block trading*** is the purchase or sale of large quantities of stock. Typically, trades involving 10,000 or more shares and $200,000 in value are considered block trades.

***Flickering quotes*** are defined in Reg NMS as rapidly changing quotes that might give false indications of trade-throughs.

***Intermarket sweep order*** is defined as a ***limit order*** that: (1) is identified as an intermarket sweep order when routed to a trading center; and (2) simultaneously with the routing of the limit order, one or more additional limit orders (also so identified) are routed to execute against all better-price protected quotations displayed by other trading centers up to their displayed size.

***Intermarket Trading System*** (***ITS***) is a computer system that interconnects competing exchange markets for the purpose of choosing the best market. The ITS is operated by the Securities Industry Automation Corporation (SIAC). The ITS Plan, originally approved by the SEC in 1979 and since amended, requires members of an exchange to avoid trade-throughs. The current rules apply to exchange members and registered market-makers who traded NYSE- and Amex-listed shares. There is no such rule with respect to the trading of NASDAQ securities.

[12] Definitions are generally drawn from a variety of online dictionaries and reference sources, unless otherwise noted.

* This definition is drawn from Ian Domowitz and Henry Yegerman, "The Cost of Algorithmic Trading: A First Look at Comparative Performance," March 2005.

***Limit Order*** is an order to buy or sell a predetermined number of shares at a specified price or better than the specified price. Limit orders also allow one to limit the length of time an order can be outstanding before being cancelled.

***Locked*** or ***crossed*** markets occur when the bid and offer quotes of a security are displayed at the same price, indicating either that one or the other's quote is not valid, that brokers are not diligently representing their clients, or that inefficiencies exist that deter trading with the quoting market. However, quotes also may lock because one or both quotes have an access fee attached, which increases the net price of trading with that quote, and creates an undisclosed spread. Quotes also may lock due to the different speeds of market centers. At times, automated markets may lock the quotes of manual markets instead of attempting to trade with those quotes.

***NMS security*** is defined as any security or class of securities for which transaction reports are collected, processed, and made available pursuant to an effective transaction reporting plan, or an effective national market system plan for reporting transactions in listed options.

***NMS stocks*** are defined as any ***NMS security*** other than an option or, in other words, stocks listed on a national securities exchange or stocks included in the National Market or SmallCap tiers of NASDAQ.

***Self-Regulating Organizations*** (***SROs***) are entities, such as the NASD or NYSE, responsible for regulating their members through the adoption and enforcement of rules and regulations governing the business conduct of its members.

***Soft dollars***, generally speaking, refer to arrangements that involve agreements or understandings by which a discretionary money manager receives research or other products or services from a broker-dealer in addition to transaction execution, and does so in exchange for the brokerage commissions from transactions from discretionary clients' accounts.

***Trading centers*** include national securities exchanges, exchange specialists, ***alternative trading systems*** (***ATS***), OTC market-makers, and block positioners.

***Trade-throughs*** are defined generally as the purchase or sale of a stock at a price that is lower than the best bid or higher than the best offer of any order execution facility that is disseminated pursuant to an effective national market system plan at the time the transaction was executed.

***Unbundling*** of commissions refers to the breaking down of the commission paid on the execution of a trade into the amounts that represent payment for the different aspects of a trade, and the products and services that the commission is used to pay for soft dollars. For example, a commission might be used to pay for pre-trade analytics, trade execution, capital commitment, third-party research and sell-side research. Unbundling would require the breakdown of the commission into the amounts that pay for each product and service.

# REGIONAL FIRMS: INCREASINGLY RETAIL-ORIENTED, BUT HOLDING THEIR OWN

## Introduction

Most analysis of trends in the U.S. securities industry focuses on high-level aggregate results, or on the quarterly results of the biggest investment banks and broker-dealers. But aggregated results or news headlines detailing the big-ticket deals can give a misleading impression of homogeneity in industry trends. In reality, the securities industry is composed of a wide range of players, with a very long tail of smaller firms serving client needs according to business models that look very different from the full-line firms with a national presence.[1]

This article looks at the regional securities firms that serve many millions of Americans and make an important contribution to the industry's overall performance, but which display characteristics markedly different from either the national firms or the plethora of small ***commission-introducing firms***.[2] Regional firms are defined as full-service broker-dealers based outside of the New York City area, offering a wide array of financial services and products to both retail and institutional clients, but without a nationwide franchise.[3] The regional firms have branch networks and are usually self-clearing.

## Market Share: Differentiated by Product and Changing Over Time

Between 1990 and 2004, the total number of New York Stock Exchange member-firms decreased to 229 from 320, a decline of 28%. This is primarily due to the long-standing and ongoing consolidation process occurring in the securities industry. Over the same timeframe, the number of NYSE member-firms classified as 'regionals' has decreased to 33 from 68, a decline of 55%. Factors that have driven this trend include the acquisition of regional firms by national full-line firms and 'intra-regional' mergers and acquisitions (M&A) activity. The decline also reflects the reclassification of firms in the Securities Industry Association database resulting from, for example, changes in firms' business models.

As a consequence, regional firms account for a smaller proportion of the NYSE membership in 2004 than they did in 1990, dropping to a 14% share from 21%. At the same time, the average size of regional firms has increased considerably. Between 1990 and 2004, the average NYSE member-firm saw gross annual revenues increase by 314% to $700 million from $169 million. During the same period, by contrast, the average regional NYSE member-firm grew at almost twice that rate, with gross revenue increasing 678% to $514 million from $66 million.

This sharp rate of increase in average regional-firm revenue has not, however, been enough to compensate for the overall decline in the number of firms in the regional grouping. As a result, the 'market share' of regional firms (as measured by share of industry gross revenues) has stabilized at around 11%, lower than the 14% recorded in 1980 but higher than the low point of 8% at the beginning of the 1990s.

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[1] This article is a summary of a longer analysis of regional firms recently published in *Securities Industry Trends*. The primary data source for this article is the NYSE component of the SIA DataBank. NASD data is not reported according to a similar member category breakdown, so this article draws on NYSE data only.

[2] Terms highlighted in ***bold blue italics*** are defined in the glossary at the end of this piece.

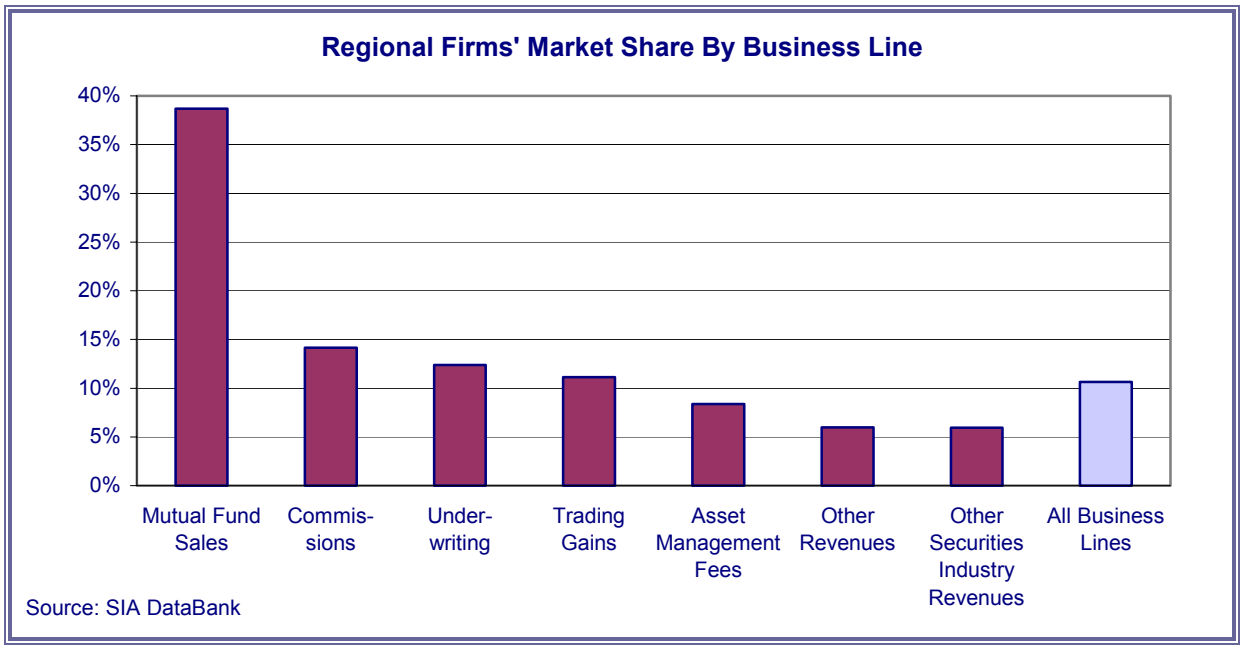
[3] Some of the national full-line firms are headquartered outside of New York City, but maintain a national branch network. These are not considered 'regional' firms for the purposes of this piece.

## *Market Share by Business Line*

The overall 11% market share of regional firms serves as a useful benchmark against which different business lines can be judged. Analyzing regional firms' market share across business lines shows that these firms' relative strength lies in retail-oriented products.

Regional firms account for over 35% of mutual-fund sales, suggesting that they 'punch above their weight' in this business line, competing effectively both with the large bulge bracket firms and the numerous smaller commission-introducing firms. Regional firms' strength in retail distribution is also reflected in their relatively large share – compared to the 11% benchmark – of the industry's commission revenues, resulting from retail customers' account activity.

By contrast, regional firms have a smaller presence in the industry's institutional businesses, such as underwriting and trading, and have little more than a 5% share in more sophisticated products such as ***prime brokerage*** and ***structured financial products*** that are reported in 'other securities industry revenues'. This reflects the fact that demand for these products comes primarily from sophisticated institutional investors (such as hedge funds) and is met by the national firms that have invested in complex information technology (IT) systems and specialized personnel. Outside the major market centers, the institutional client base tends to be relatively smaller and with less complex needs, and hence has lower demand for more sophisticated capital market products and services.

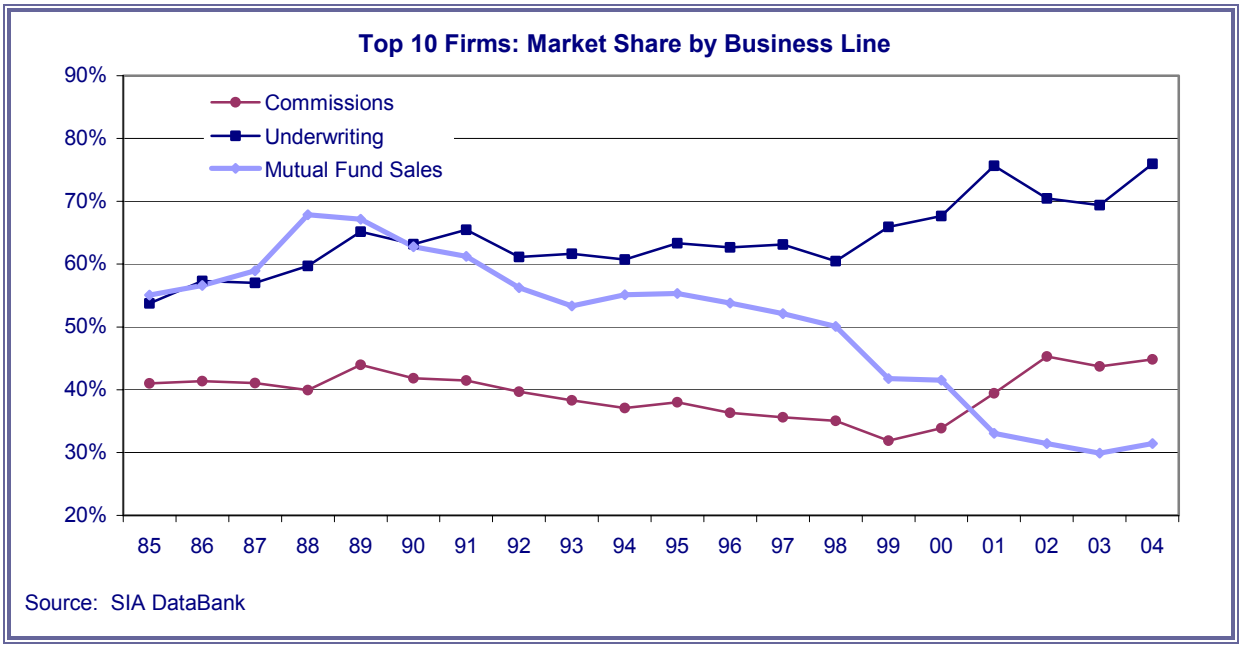



These business-line patterns have become more pronounced over time. On the retail side, regional firms have managed to maintain – and in the last five years increase – a viable franchise in retail products, despite ongoing consolidation in the industry. In particular, regional firms have grown their retail sales forces at a faster pace than the national firms. On the institutional side, regional firms' share of the main product lines has remained largely unchanged, suggesting that regional firms have been successful in defending their franchise and maintaining a viable business, but that they have not been able to expand their institutional businesses to any significant degree.

### *Concentration at the Top End*

Another way of analyzing how revenues are distributed across different segments of the securities industry is to look at the degree of concentration at the top end: in other words, the marketshare of the top 10 or 25 firms. This approach tells a similar story of increasing dominance in some institutional products by the national firms, but a loss of market share in retail products. For example, the share of mutual-fund sales revenue accounted for by the top 10 broker-dealers has declined to roughly 30% from 55% over the past 20 years.

On the primary market side, the top firms have been gaining a greater share of the pie, particularly during the boom in underwriting and initial public offering (IPO) activity in the late 1990s. The top 10 firms now account for 75% of the underwriting market, a figure that rises to nearly 90% when looking at the top 25 firms. This increasing degree of concentration largely reflects two trends: first, the competition among top-tier firms to win a greater share of these lucrative mandates, manifested in a build-up of investment-banking teams; and second, the large-scale consolidation that corporate America has itself gone through over the past decade, which has reduced the relative contribution of middle-market companies to primary market deal-flow.




## Characteristics of Regional Firms: A Different Revenue Mix and Cost Base

### *Revenue Mix*

As a whole, the securities industry's revenue mix is characterized by three themes. First, revenues derived from prime brokerage, structured financial products, M&A advisory services and other – largely institutional – business lines, which are classified in the SIA DataBank as 'other securities business revenues', are growing in importance. Because some of these products and services are relatively new offerings, they have generated the largest share of overall industry growth. Having accounted for less than 20% of revenues back in 1980, this 'other' reporting line now accounts for nearly 40% of the overall industry's top line.

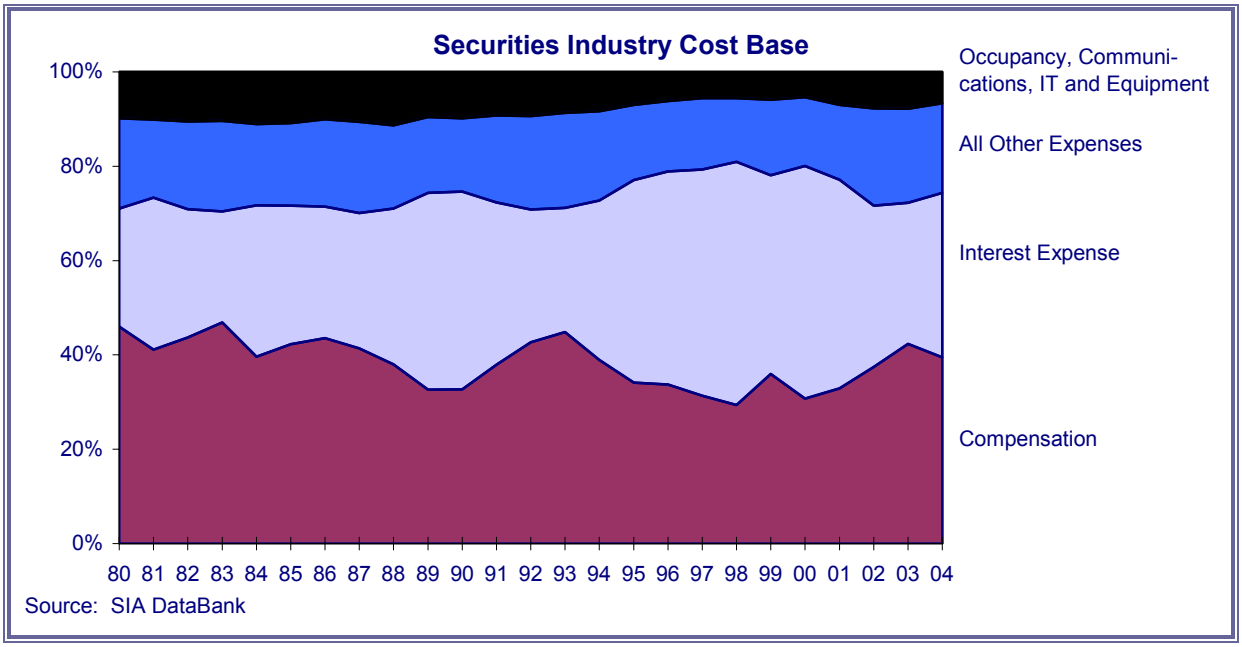
Second, some business lines are more volatile than others. In particular, trading gains show significant variation in their share of revenues. Business lines like M&A – reported in 'other securities industry revenues' – also vary more in their contribution to overall revenues than less cyclical businesses such as commissions, where growth tends to follow broader market trends.

Third, over the long term, primarily retail-oriented business lines, such as mutual-fund sales and asset management, have become a more important part of the revenue mix. These items have grown from less than 2% of industry revenues in 1980 to nearly 15% currently.

The revenue mix for regional firms differs significantly from the industry average.[4] The long-term picture shows a shift away from institutional products and commission flow to a greater reliance on retail products. Retail-oriented revenues have grown to account for nearly one-quarter of regional firms' revenues, up from less than 3% in 1980. Commission revenues have deteriorated steadily over the past 25 years as a result of declining commission levels[5] and because regional firms' clients are largely retail, this secular pricing trend has not been offset by the increased trading volume of institutional investors. 'Other securities industry revenues' have also grown – though not to the same extent as for the industry in aggregate – as a result of regional firms' participation in the M&A boom in the late 1990s.

## Cost Base

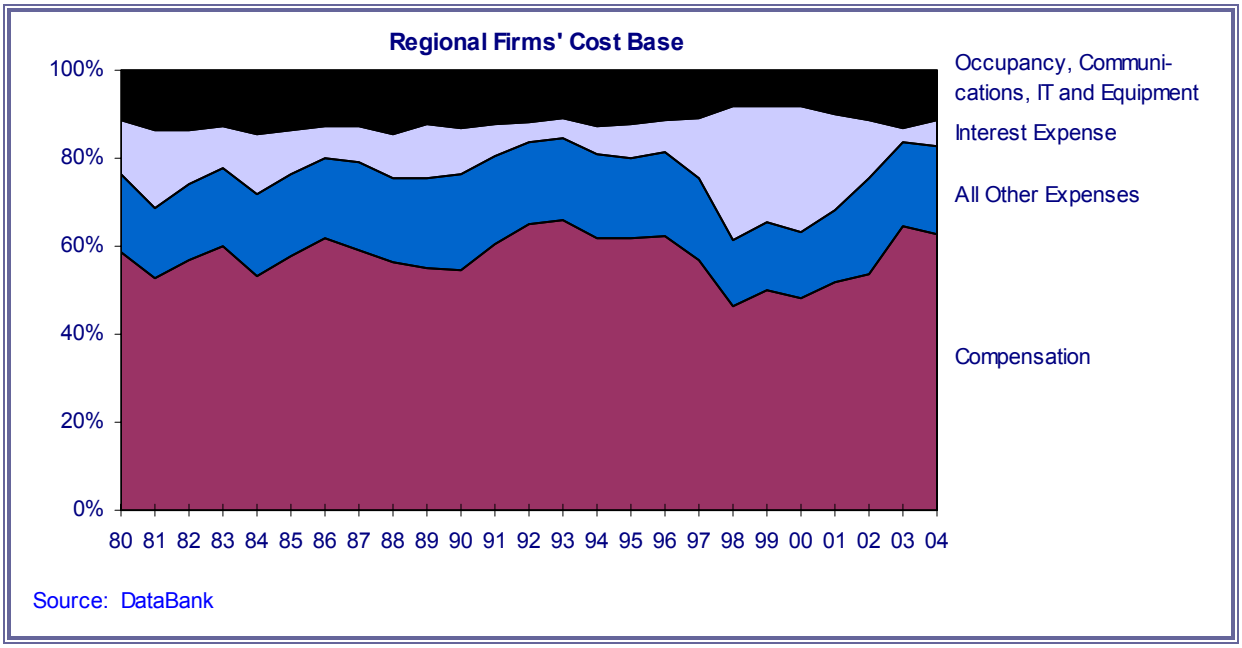
Turning to the industry's cost base, significant differences between the industry-wide picture and the regional firm segment are again apparent. At the aggregate level, compensation – including salaries, bonuses and production payouts for ***registered representatives*** (***RRs***) – has traditionally been the largest single cost item, typically accounting for a little more than 40% of total expenses. However, in recent years, interest expense has become a more significant component of total costs, driven by the progressively greater capital intensity of the securities industry. An increase in borrowing for both client facilitation and proprietary needs appears on the income statement as increased interest expense.




[4] Note here that the revenue mix differs from the 'market share' in each product. For example, regional firms have the biggest 'market share' in mutual-fund sales. However, because total mutual-fund sales are dwarfed by total commissions, regional firms still record higher revenue levels for commissions despite having a lower market share in that particular business line.

[5] For more details on declining commission levels, see *Securities Industry Trends*, Vol. XXXI, No. 3 (May 6, 2005).

Because the demand for borrowing is driven largely by either institutional clients or internal proprietary trading requirements, regional firms have traditionally had much lower levels of interest expense. As a percentage of total expense, interest expense has averaged only 12% for regional firms over the past 20 years, compared to 36% for the industry overall.[6] Compensation has usually made up the lion's share of regional firms' cost base. However, compensation costs for regional firms are significantly higher than the industry average, even when interest expense is stripped out. The compensation ratio, calculated as total compensation expense as a percentage of net revenues (gross revenues less interest expense) and which is used as a key cost control metric, averaged 61% for regional firms between 2002 and 2004. The average for all firms over the same timeframe was 52%, a full nine percentage points lower.




## Profitability

For many years prior to the late 1990s, regional firms delivered a higher return on equity than the securities industry average. This was driven by both sides of the ratio. On the equity side, as noted above, the regional segment of the industry is less capital-intensive because of its retail orientation, requiring less capital per dollar of revenues generated. On the return side of the equation, the M&A deals and underwriting mandates that regional firms do win have been highly profitable, due to several factors:

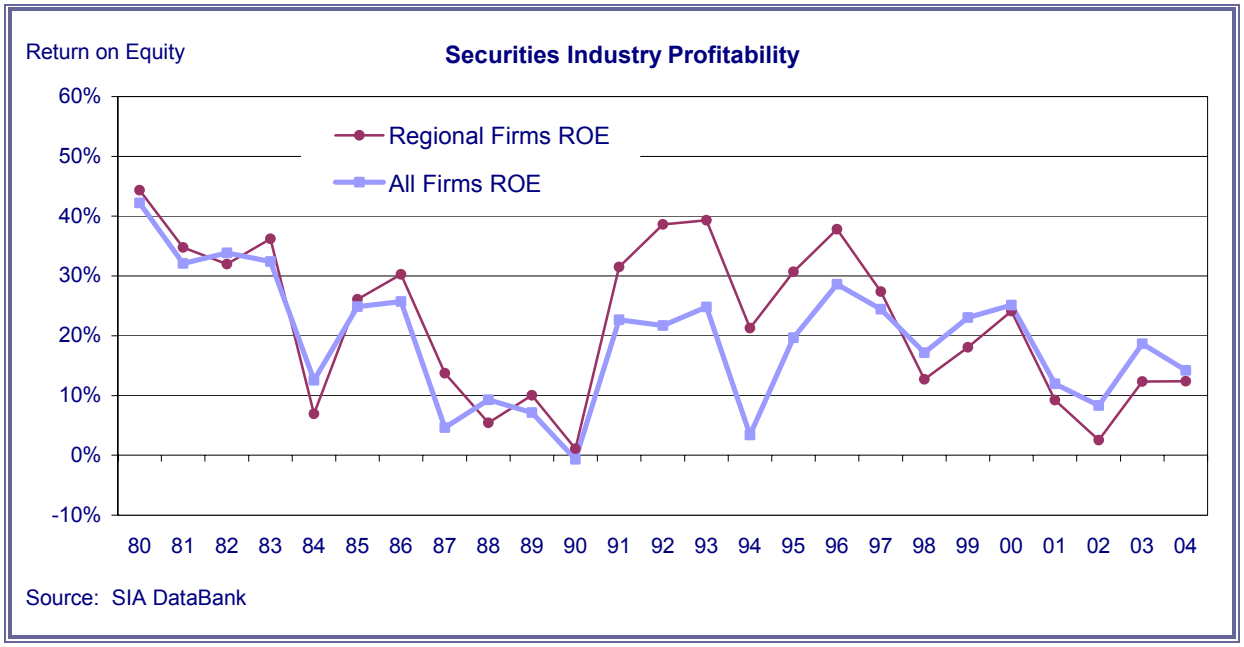
— Because deal sizes are smaller, total advisory fees do not hit the ceiling that applies to mega-deals, increasing the average effective margin (fees as a percentage of deal size) that advisers earn;

— In middle-market deals, firms are frequently sole advisers and thus collect the full deal fee, rather than splitting fees with the multiple advisers that are common in larger deals; and,

— Where underwriting or M&A deals are accompanied by a financing package, the average lower credit rating of middle-market clients means that higher interest rates can be charged, increasing interest margins above the razor-thin levels charged to blue-chip clients.[7]

[6] There was, however, a significant spike in regional firms' interest expense between 1998 and 2001. It is likely that this resulted from significant amounts of client margin investing during the run up to the high-tech market's peak, as well as greater demand for credit from institutional clients during the M&A boom at that time.

[7] On a risk-adjusted basis, interest revenues from clients with greater credit risk may be no higher than those for blue-chip clients.




However, regional firms' profitability advantage has been reversed in the past seven years. This is likely due to several factors. First, the bull market of the late 1990s was marked by hyperactive primary markets, which produced bumper profits for the national firms that were best positioned to solicit and handle the resulting deal flow, and distribute securities to a national investor base. Secondly, the national firms were also better positioned to weather the bursting of the bubble, with a more diverse set of product lines cushioning the fall in retail business, equity origination and M&A activity. In particular, the national firms maintained profitability via extraordinarily strong trading gains from late 2002 to early 2004. Third, national firms have also aggressively managed their cost-base, while regional firms have been hampered by relatively high compensation ratios. Fourth, the consolidation phase of the 1990s may in itself have driven down average regional firm profitability; as national firms cherry-picked smaller firms with high-margin franchises, the firms left behind in the regional segment are likely to have had lower average returns on equity.

## Conclusion

It remains to be seen whether the regional firms' middle-market and retail client base will lead them back to consistently higher levels of profitability than the industry average. With business models that are increasingly predicated on leveraging a high-cost RR network, regional firms will need to prove that RRs can continue to generate business even in tough market conditions.

Ultimately, the fate of the regional segment will be decided by the secular rate of growth in the broader U.S. retail market. On balance, the outlook is broadly positive: while we expect to see further consolidation in the sector, both 'intra-regional' and via acquisitions by national firms, we do not expect the regional segment's market share to shrink significantly below the 10% mark, thanks to the long-term demand for its products and services.

***Rob Mills***
*Vice President and Director, Industry Research*

## Glossary

***Commission-introducing firms***. Broker-dealers that only 'introduce' commission business, but which do not carry or clear their own customer accounts.

***Prime brokerage***. The services offered by broker-dealers to a client under a prime brokerage agreement that allow the broker-dealer to provide clearing, settlement and custody services for a client regardless of where the client executed the securities transaction. Other services provided by prime brokers may include, but are not limited to, margin lending, securities lending, record keeping and performance reporting, risk management systems, analytic and information platforms, direct market access and capital introduction.

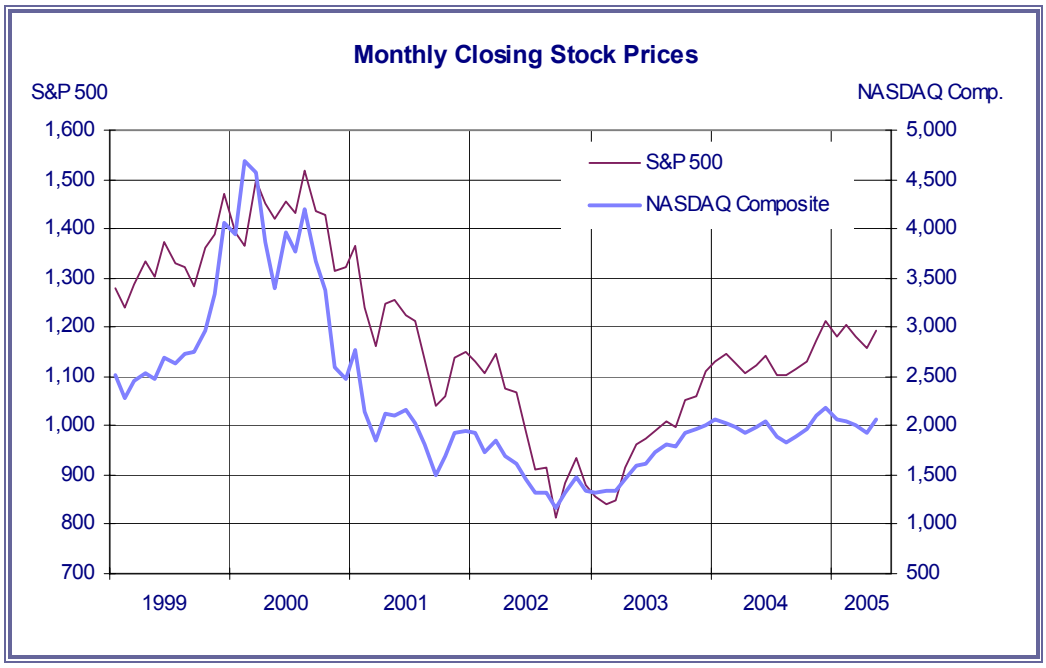
***Registered representative*** (***RR***). An individual who, having passed the Series 7 and Series 63 examinations, is licensed to handle accounts or orders for the sale and purchase of securities and related products to and from the general public. Registered representatives are regulated by the NASD, and must participate in continuing education programs to retain a valid license. RRs must be affiliated with a broker-dealer, and are normally paid by commission on the products they sell and transactions they execute. In general, RRs are not permitted to offer investment advice. However, they are currently allowed to offer advice that is 'incidental' to their business, if no special compensation is received for that service.

***Structured financial products***. Financial instruments that are designed to deliver a tailored series of cash flows with a unique risk profile. For companies, they provide innovative ways to raise cash; for investors, they represent instruments with very specific risk-return profiles. Examples of structured financial products include financial derivatives for market and credit risks, asset-backed securities with customized cash flow features, and specialized financial conduits that manage pools of purchased assets.

## U.S. Equity Market Activity

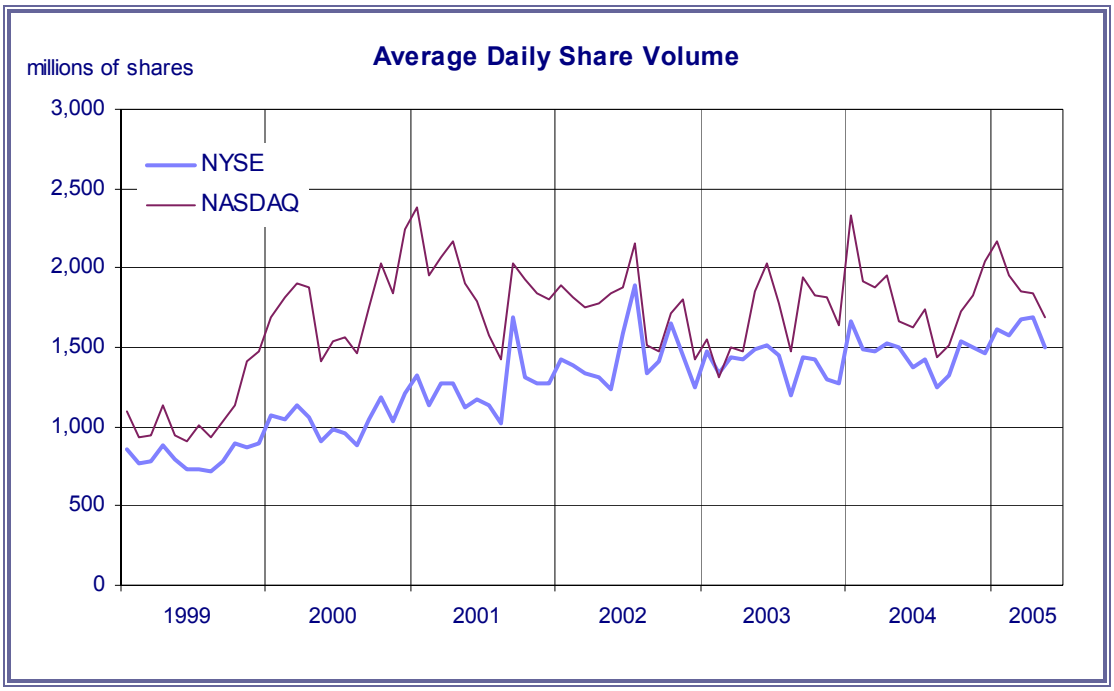
*Stock Prices* – The three major market indices posted their best monthly gains so far this year in May. Generally positive economic news, a steep drop in crude oil prices in mid-May to nearly $46 per barrel from the April high of $58 a barrel, and a benign inflation report raised hopes that the Federal Reserve may soon end its series of interest-rate hikes. Further, strong first-quarter earnings results and increased second-quarter profit forecasts for some bellwether technology companies helped spur a revival in the tech sector, which had performed poorly since the start of the year. The NASDAQ Composite Index broke a four-month losing streak with a 7.6% gain in May, its biggest monthly advance since October 2003. The Dow Jones Industrial Average rose 2.7% in May, and the broader-based Standard & Poor's 500 Index increased 3.0%, following two sequential monthly declines in both of these indices.

Even with the market's impressive gains in May, though, the benchmark indices remained in negative territory for the year-to-date. The NASDAQ Composite was still down 4.9%, the DJIA off 2.9%, and the S&P 500 down 1.7% since the end of 2004.



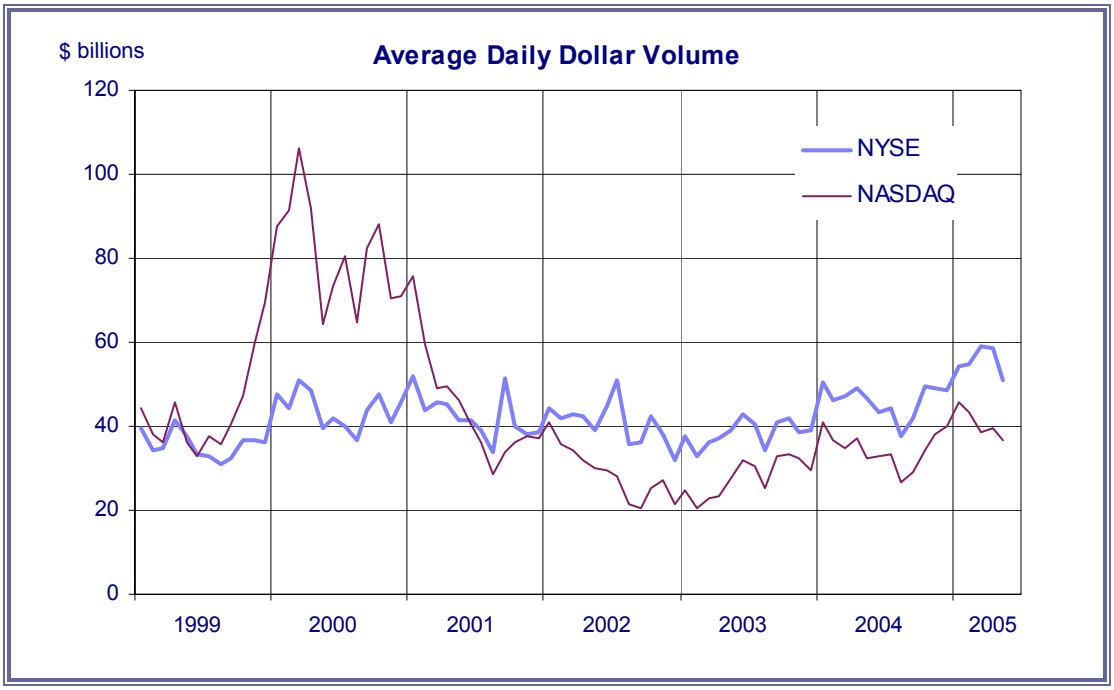

*Share Volume* – Trading activity on the major U.S. equity markets sank to its lowest level of the year in May. Average daily share volume on the New York Stock Exchange slid 11.3% to 1.50 billion in May from this year's monthly high of 1.69 billion in April. Meanwhile, average daily share volume on NASDAQ dropped 8.4% for the month to 1.69 billion in May.

Despite the slowdown in trading witnessed during May, year-to-date share volume remains above last year's levels both on the NYSE and NASDAQ. NYSE share volume year-to-date, at 1.62 billion shares daily, is 10.9% above 2004's daily average of 1.46 billion. NASDAQ daily share volume through this year's first five months is up 5.2% over last year, averaging nearly 1.90 billion compared with 1.80 billion in 2004.

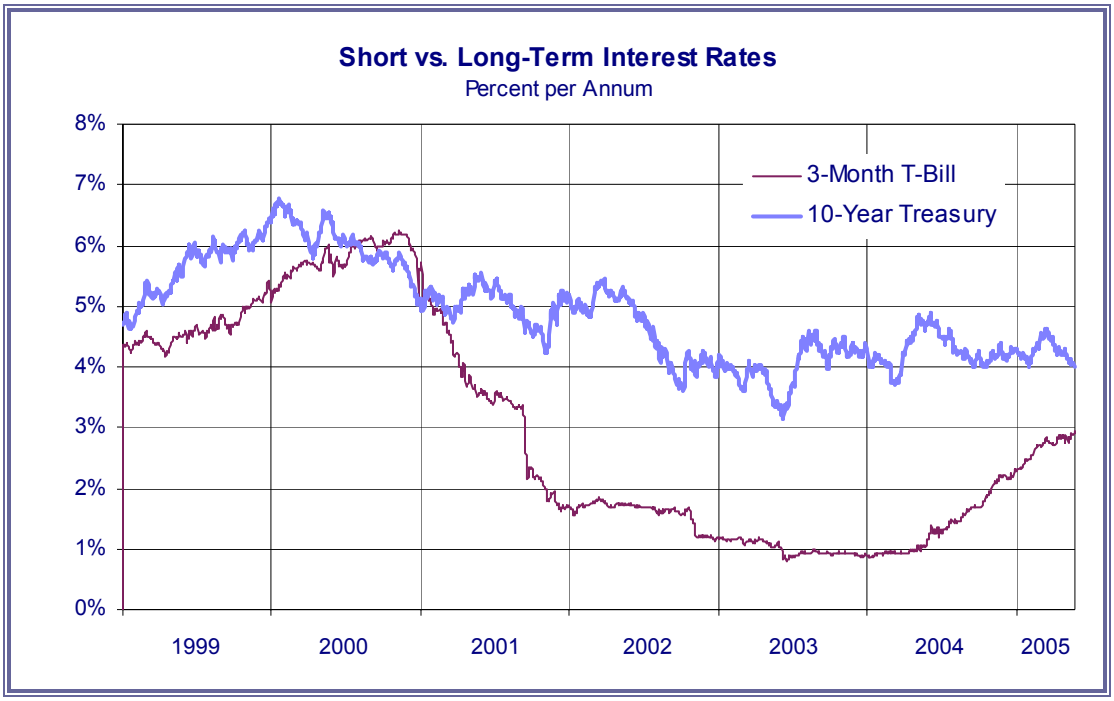



***Dollar Volume*** – In May, the dollar value of shares traded also sank to a new monthly 2005 low amid curtailed trading activity. NYSE average daily dollar volume fell 13.6% from April's level to $50.8 billion, while NASDAQ daily dollar volume declined 7.6% to $36.6 billion.

Even so, year-to-date NYSE daily dollar volume of $55.5 billion remains 20.4% above 2004's pace. NASDAQ's average daily dollar volume of $40.6 billion through the first five months of 2005 is 17.3% higher than 2004's $34.6 billion average.



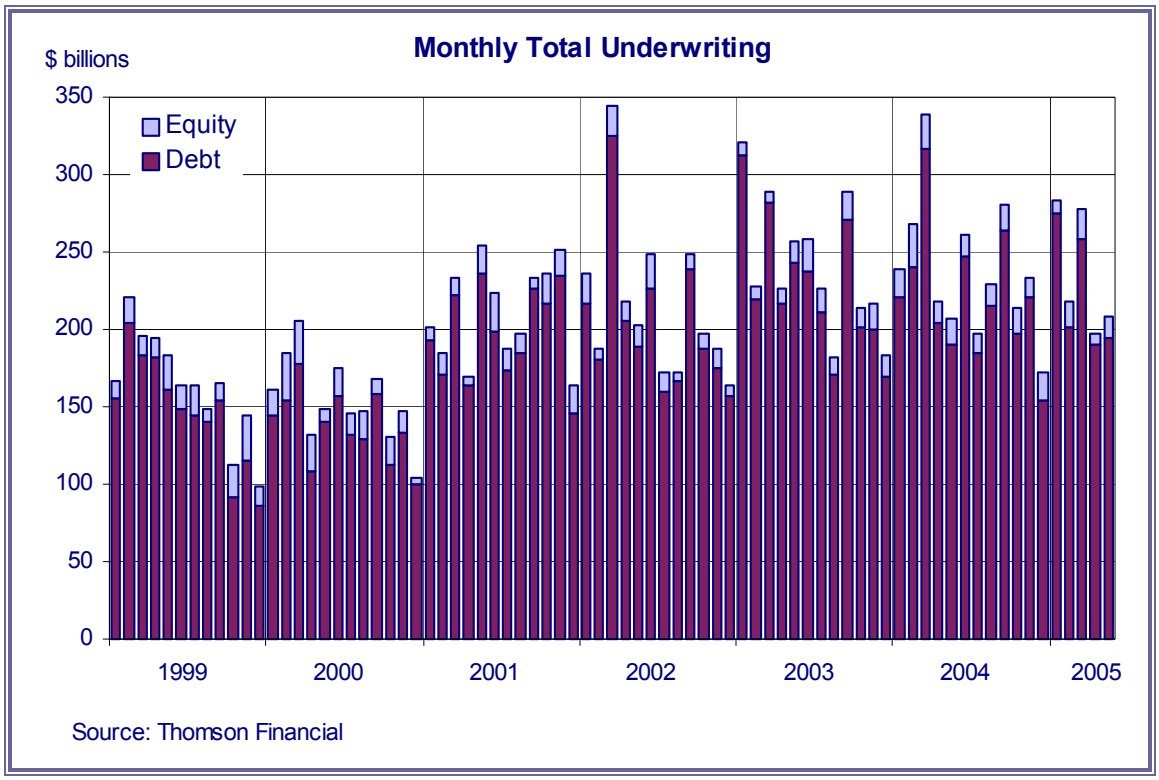
***Interest Rates*** – Bond yields climbed in the opening days of the month in reaction to a stronger-than-expected April employment report and another interest rate hike by the Fed that brought the federal funds rate to 3%. However, yields headed south once again after an inflation report showed core consumer prices (excluding food and energy costs) were unchanged in April. The yield on the benchmark 10-year Treasury note finished May at 4.00%, down from 4.21% at the end of April. Meanwhile, the yield on three-month T-bills moved up to 2.93% by May's close from 2.84% at April's close. Accordingly, the yield spread narrowed to 107 basis points (bps) in May, or roughly half the 206 bps differential at the end of 2004.

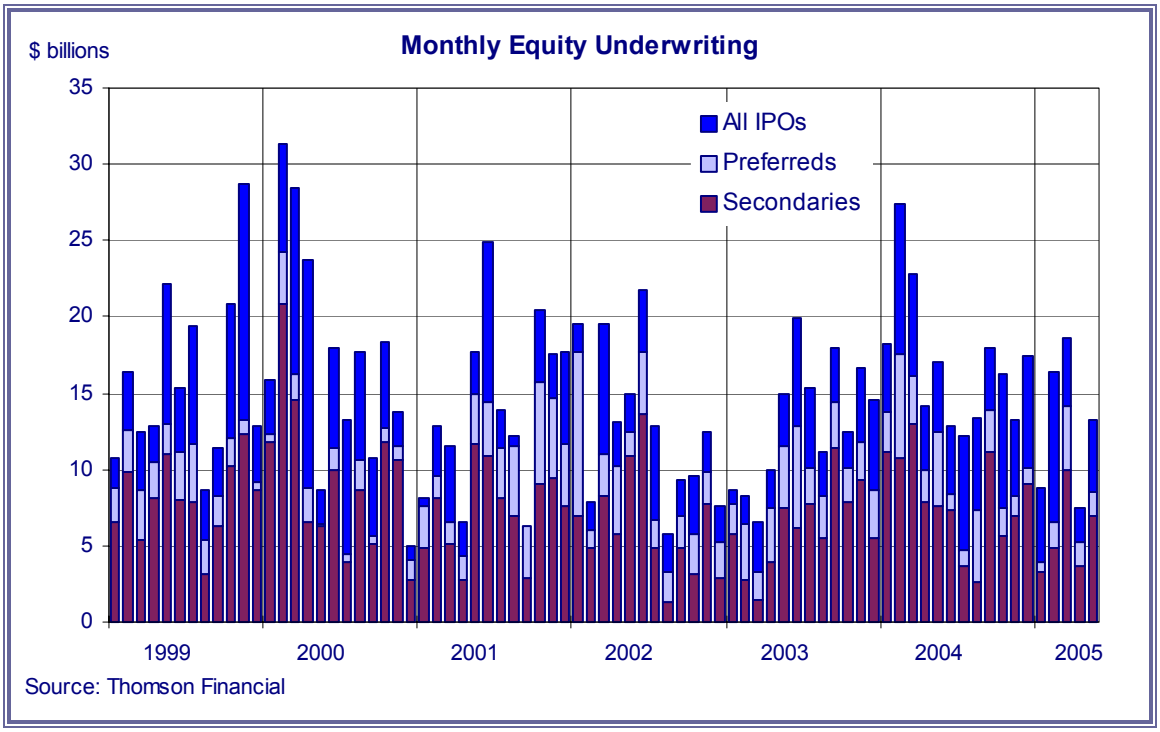



## U.S. Underwriting Activity

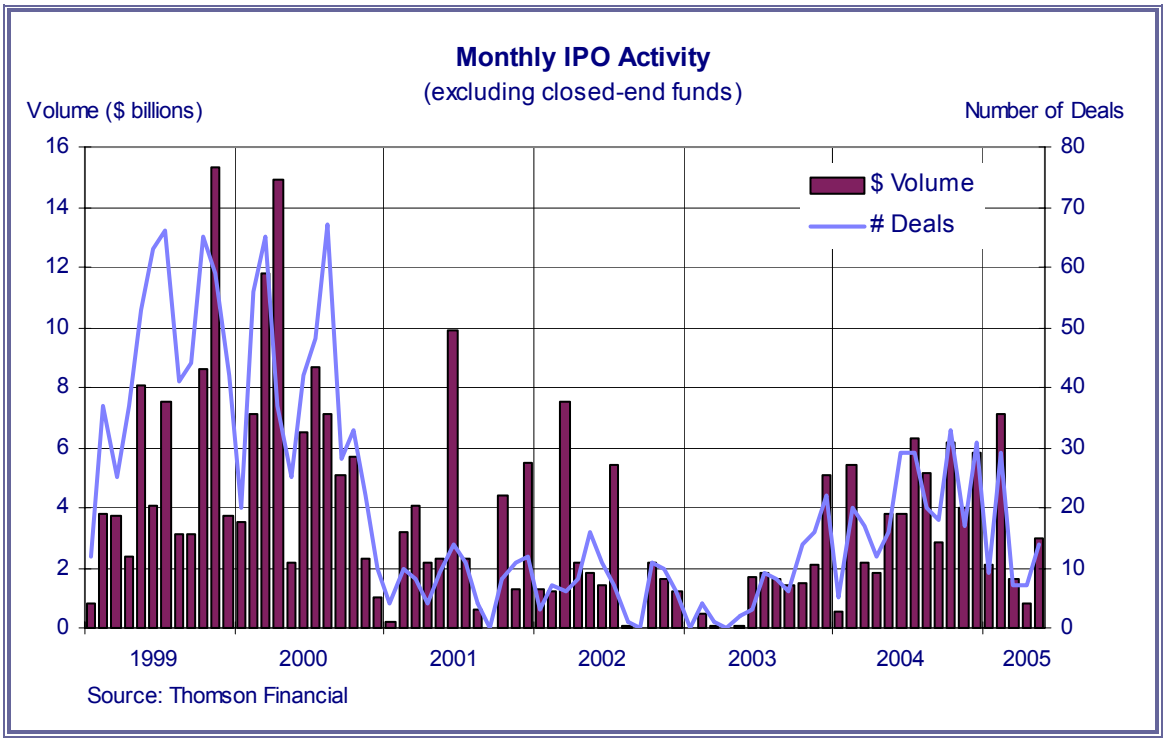
New issuance of stocks and bonds increased in May amid rising stock prices and falling long-term interest rates. Total underwriting activity in the U.S. market increased 5.5% in May to reach $207.9 billion from $197.1 billion in April. Nevertheless, overall underwriting activity year-to-date is still down 6.8% from the year-earlier period, totaling $1.18 trillion compared with $1.27 trillion in 2004.

***Equity Underwriting*** – Common and preferred stock issuance strengthened in May, reflecting the more favorable stock market environment. After plunging nearly 60% in April to a two-year low of $7.5 billion, total equity issuance rose 76% in May to $13.2 billion. Despite the monthly improvement, new equity issuance year-to-date, at $64.5 billion, was 35.2% lower than the $99.5 billion issued in the same period a year earlier.

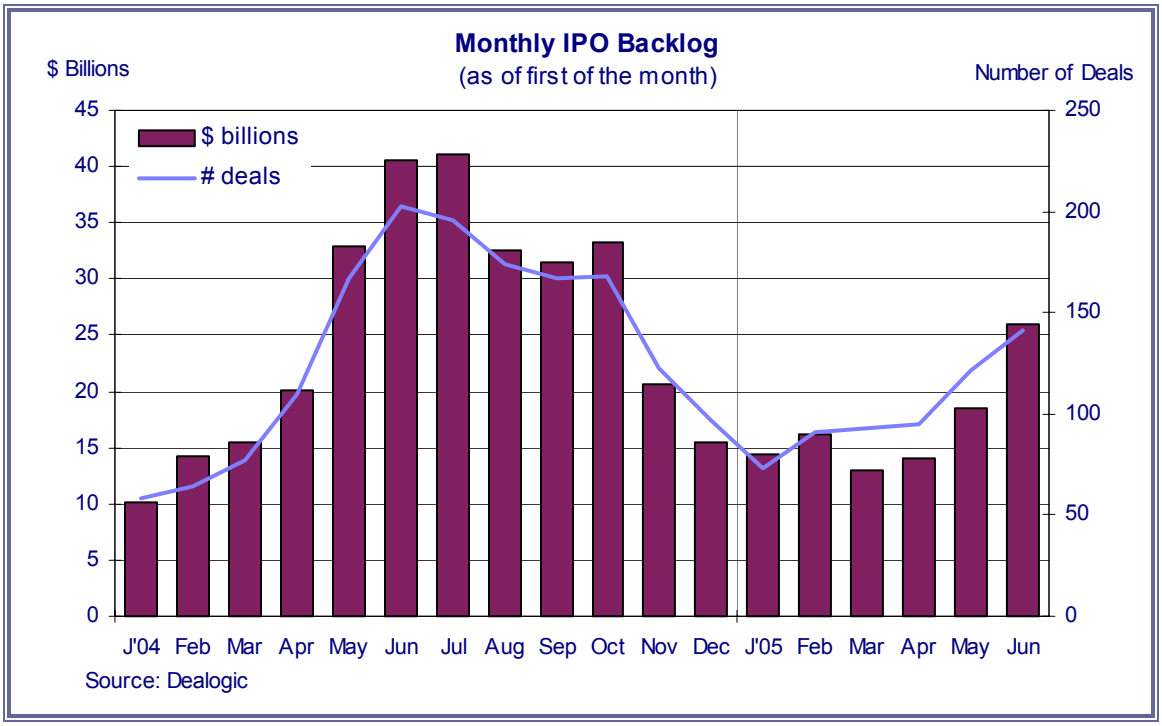

Monthly Total Underwriting
$ billions
350
300
250
200
150
100
50
0
Equity
Debt
1999
2000
2001
2002
2003
2004
2005
Source: Thomson Financial


Monthly Equity Underwriting
$ billions
35
30
25
20
15
10
5
0
All IPOs
Preferreds
Secondaries
1999
2000
2001
2002
2003
2004
2005
Source: Thomson Financial

***Initial Public Offerings*** – May's IPO dollar volume of $3.0 billion was nearly quadruple April's level of $0.8 billion and was the second-best monthly showing so far this year. Year-to-date, $14.5 billion was raised in the U.S. IPO market, 5.5% more than the $13.8 billion raised in the same period last year.



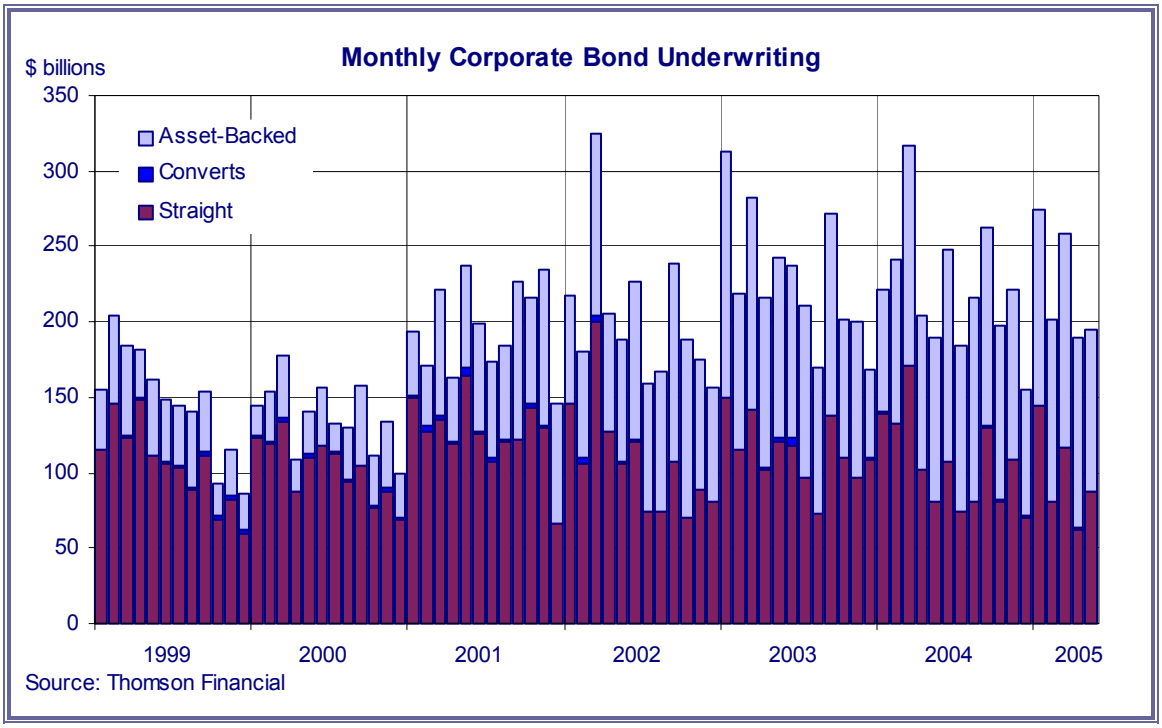

The filed U.S. IPO backlog increased to $26.0 billion as of June 1, up from $18.5 billion in the prior month but down from year-earlier levels of $40.6 billion.



***Corporate Bond Underwriting*** – Overall corporate bond issuance increased 2.6% in May from April's level of $189.7 billion. Through the first five months of 2005, corporate bond underwriting activity totaled $1.12 trillion, down 4.4% from $1.17 trillion in the same year-earlier period.

New issuance of straight corporate debt, which sank to a five-year monthly low of $62.3 billion in April, surged 40.6% in May to $87.6 billion. Even so, year-to-date issuance of $491.4 billion remains 21.4% below the $625.1 billion issued in last year's comparable period.

Asset-backed debt offerings decreased 15.4% from April's level to a new 2005 monthly low of $107.1 billion in May. Despite the monthly decline, the year-to-date total of $626.8 billion is still 15.3% above the $543.5 billion offered in the similar period last year.




***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 | 144.6 | 0.2 | 130.2 | 274.9 | 8.1 | 0.7 | 8.8 | 4.9 | 2.1 | 3.3 | 283.7 |
| Feb | 80.3 | 0.0 | 121.4 | 201.6 | 14.7 | 1.7 | 16.4 | 9.8 | 7.1 | 4.9 | 218.0 |
| Mar | 116.7 | 0.5 | 141.6 | 258.7 | 14.4 | 4.2 | 18.6 | 4.4 | 1.6 | 10.0 | 277.4 |
| Apr | 62.3 | 0.8 | 126.6 | 189.7 | 5.9 | 1.5 | 7.5 | 2.2 | 0.8 | 3.7 | 197.1 |
| May | 87.6 | 0.0 | 107.1 | 194.7 | 11.7 | 1.5 | 13.2 | 4.8 | 3.0 | 6.9 | 207.9 |
| YTD '04 | 625.1 | 3.1 | 543.5 | 1,171.7 | 80.0 | 19.4 | 99.5 | 29.7 | 13.8 | 50.3 | 1,271.1 |
| YTD '05 | 491.4 | 1.5 | 626.8 | 1,119.6 | 54.8 | 9.7 | 64.5 | 26.1 | 14.5 | 28.8 | 1,184.1 |
| % Change | -21.4% | -50.9% | 15.3% | -4.4% | -31.5% | -50.2% | -35.2% | -12.3% | 5.5% | -42.8% | -6.8% |

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 | 11.6 | 12.6 | 3.6 | 6.6 | 10.2 | 22.8 | 2.33 | 4.22 | 1.89 |
| Feb | 1.5 | 15.6 | 17.1 | 4.5 | 9.2 | 13.6 | 30.8 | 2.54 | 4.17 | 1.63 |
| Mar | 1.2 | 24.0 | 25.2 | 7.1 | 12.5 | 19.6 | 44.8 | 2.74 | 4.50 | 1.76 |
| Apr | 1.9 | 16.5 | 18.4 | 5.0 | 8.0 | 13.0 | 31.4 | 2.76 | 4.34 | 1.58 |
| May | 1.4 | 21.4 | 22.8 | 4.0 | 9.0 | 13.0 | 35.8 | 2.84 | 4.14 | 1.30 |
| YTD '04 | 6.8 | 89.2 | 96.0 | 20.6 | 36.8 | 57.4 | 153.5 | 0.94 | 4.23 | 3.28 |
| YTD '05 | 6.9 | 89.2 | 96.1 | 24.2 | 45.1 | 69.4 | 165.5 | 2.64 | 4.27 | 1.63 |
| % Change | 1.4% | 0.0% | 0.1% | 17.7% | 22.5% | 20.8% | 7.8% | 180.5% | 1.1% | -50.3% |

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 | 51.8 | 1,685.6 | 50.8 | 36.6 |
| YTD '04 | 10,188.45 | 1,120.68 | 6,484.72 | 1,986.74 | 1,528.2 | 77.4 | 1,947.1 | 47.9 | 36.3 |
| YTD '05 | 10,467.48 | 1,191.50 | 7,134.33 | 2,068.22 | 1,616.2 | 61.1 | 1,895.1 | 55.5 | 40.6 |
| % Change | 2.7% | 6.3% | 10.0% | 4.1% | 5.8% | -21.1% | -2.7% | 15.8% | 11.9% |

## 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 | 3,796.9 | 462.4 | 1,229.2 | 1,953.6 | 7,442.2 |
| Aug | 3,804.1 | 469.9 | 1,253.4 | 1,944.5 | 7,471.8 |
| 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 | 4,246.9 | 523.6 | 1,305.7 | 1,842.8 | 7,919.0 |
| YTD '04 | 3,811.3 | 452.5 | 1,245.7 | 1,964.2 | 7,473.7 |
| YTD '05 | 4,246.9 | 523.6 | 1,305.7 | 1,842.8 | 7,919.0 |
| % Change | 11.4% | 15.7% | 4.8% | -6.2% | 6.0% |

## 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 | -21.3 | -16.4 | 4.9 |
| July | 9.4 | 3.0 | -1.2 | -2.0 | 9.2 | 11.2 |
| Aug | 1.2 | 2.6 | 4.2 | -10.3 | -2.3 | 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 | 8.8 | 2.6 | 1.2 | -35.4 | -22.8 | 12.6 |
| YTD '04 | 107.7 | 19.8 | 1.0 | -93.5 | 35.0 | 128.5 |
| YTD '05 | 56.0 | 16.2 | 7.1 | -84.1 | -4.7 | 79.4 |
| % Change | -48.0% | -18.1% | 639.5% | NM | -113.6% | -38.2% |

* New sales (excluding reinvested dividends) minus redemptions, combined with net exchanges

Source: Investment Company Institute

**Securities Industry Association**

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